

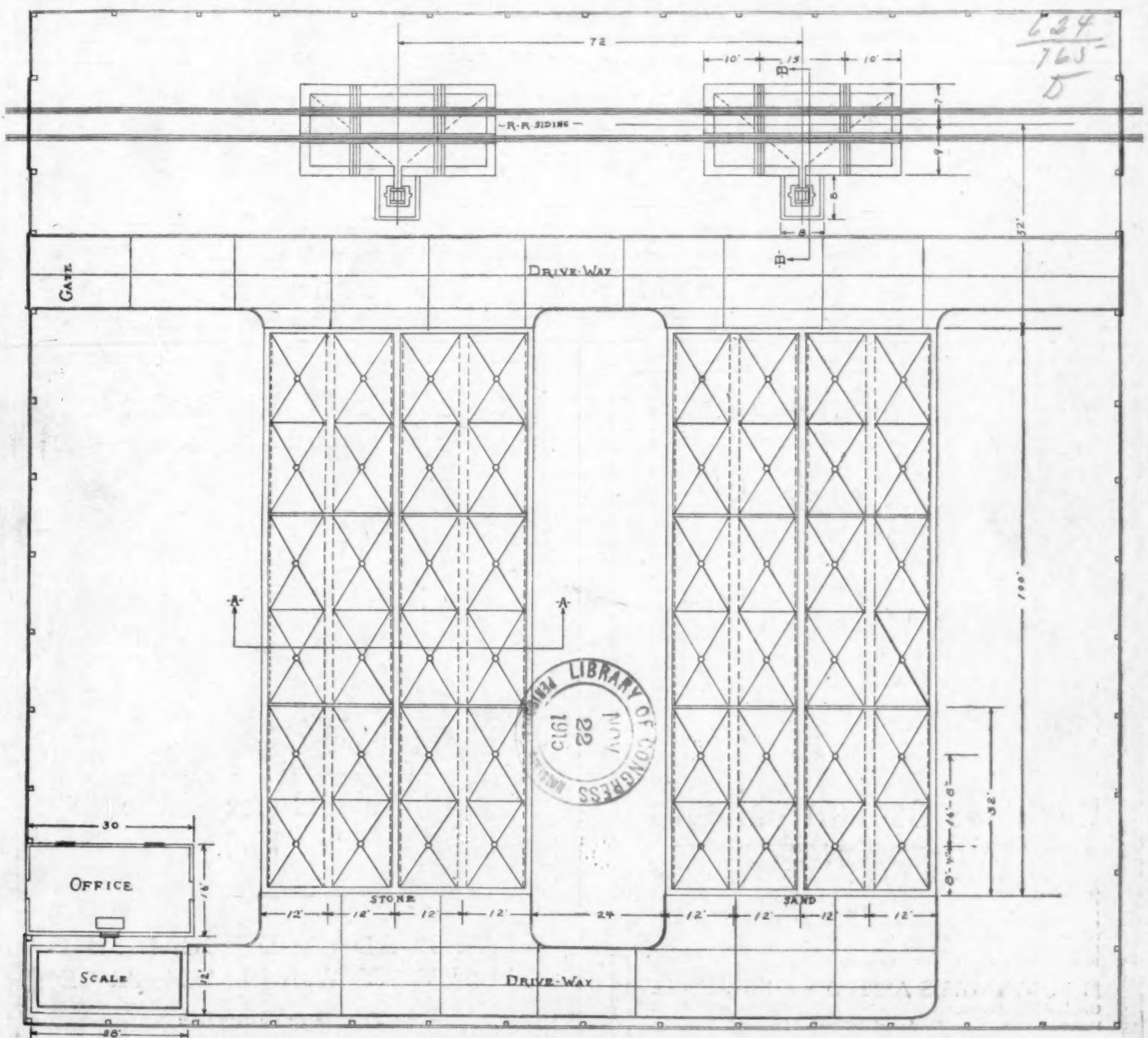
Rock Products and BUILDING MATERIALS

INCORPORATING DEALERS BUILDING MATERIAL RECORD

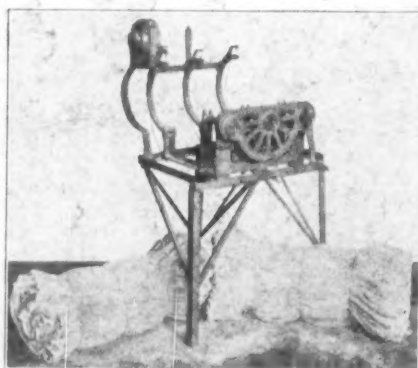
Volume XVII.

CHICAGO, ILL., NOVEMBER 7, 1915.

Number 1.



SAND, GRAVEL AND CRUSHED STONE YARD LAYOUT (SEE PAGE 12).



Bag Bundler

IT COUNTS 'EM AND
BUNDLES 'EM

Saves Time
Eliminates Errors

A few of our many customers say:

"It does the work of three men."
"Will shortly order three more."
"Would not take three times what we paid for it."
"It is a wonderful money saver."

Write for prices

**The Faerberhill
Manufacturing Co.**
1392 East 40th St., CLEVELAND, O.

Agents wanted in every city. A side line for machinery and builders supply salesman.



"PENNSYLVANIA"

Hammer Crushers For Crushing and Pulverizing Lime, Limestone, Gypsum, Marl, Shale, Etc.

Main Frame of Steel, "Ball and Socket" self-aligning Bearings; forged Steel Shaft; Steel Wear Liners; Cage adjustable by hand wheel while Crusher is running.

No other hammer Crusher has such a big Safety Factor.

Pennsylvania Crusher Co.
New York PHILADELPHIA Pittsburgh

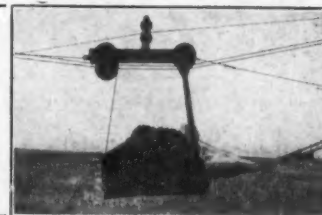
(Patented)

This Is Our Type "F" Bucket

Write us your condition and requirements and we will advise you if our equipment is adapted to your work

The Cable Excavator Co.

Commercial Trust Building,
PHILADELPHIA, PENNA.



Daily Capacity
7000 Barrels



The Quality
Cement of the
Middle West

MORE THAN FIFTEEN YEARS OF SATISFACTION

THREE PLANTS: ALPENA — DETROIT — WYANDOTTE

HURON AND WYANDOTTE

Water and Rail Facilities Best Serve the
Entire Middle West

EVERY BARREL TESTED AND GUARANTEED. SOLD BY THE BEST DEALERS EVERYWHERE

Main Office: 1525 Ford Bldg., Detroit, Michigan

Daily Capacity
3000 Barrels



The Leading
Concrete
Cement



Beautiful Houses from Illinois to
Massachusetts are Roofed
with Reynolds Flexible
Asphalt Shingles

A multitude of pretentious residences in a score of states are giving ample proof of the long-lasting surface of Reynolds Flexible Asphalt Shingles.

Every type of modern home can be protected and beautified, at lower cost, with these time-

tried, weather-tested shingles. They withstand the ravages of driving rain, pelting hail, hottest sun and heaviest snow without warping, cracking, splitting, curling or blowing off. Sparks cannot set them of fire. Long Exposure cannot dull their rich color. Adaptable to every style of pitched roof, and make possible unusual architectural effects, such as roll edges, thatch effects and rounded corners.

Reynolds Asphalt Shingles

Guaranteed for 10 years—will wear many years longer—
Write for liberal agency proposition.

Rough-surfaced weather defiers made of crushed slate or granite securely embedded in pure Asphalt. Natural colors of garnet, red or gray-green which never fade and never need painting. We are the original makers of flexible asphalt slate shingles and tested them for ten years before putting them on the market. They are uniform in size—8 ins. by 12½ ins.—and are laid 4 ins. to the weather. Easily and quickly laid. Let us send you a booklet showing photographs of modern houses roofed with Reynolds Asphalt Shingles. Write for a copy TODAY.

H. M. REYNOLDS ASPHALT SHINGLE CO.
Original Manufacturer Grand Rapids, Mich.
Established 1868 Members of National Builders' Supply Association

Wheeling Wall Plaster Co.

WHEELING, W. VA.



The Building Material
Supply House of the
Ohio Valley

CAR LOADS AND LOCAL SHIP-
MENTS AT WHOLESALE PRICES

Try Our Service

Tell 'em you saw it in ROCK PRODUCTS AND BUILDING MATERIALS



United States Custom House and Postoffice, Omaha, Neb.
KALLOLITE PLASTER USED

Kallolite Cement Plaster

Was used on the Omaha Post Office, as well as many other

Government and Public Buildings.

Kallolite Cement Plaster is manufactured from the Purest Gypsum Rock found in the United States as shown by last Government Report.

CARDIFF GYPSUM PLASTER CO.

✉ Write for literature.

FT. DODGE, IOWA



About Bakup and Partition Tile—

You ought to handle our 4x5x12 and 5x8x12 BAKUP TILE made from high-grade "Ohio" fire clay. We have a nice stock from which to make prompt shipments.

You can also get PARTITION TILE from us in sizes 3x12x12 up to 12x12x12.

One shipment from us will easily convince you that our material is what you ought to handle.

Write us for prices, etc.

**THE
METROPOLITAN PAVING BRICK COMPANY**
Canton, Ohio

Tell 'em you saw it in ROCK PRODUCTS AND BUILDING MATERIALS



Haiss Wagon Loaders

(Patented)

dig and load trap rock, sand, gravel, coal, coke, etc., at a rate of 1 cu. yd. a minute, and at a cost of less than 1 cent a cu. yd. for electric or gasoline power.

Haiss Wagon Loaders save 10 cents a cu. yd. on all material handled with them.

Write for cost comparing data, and on how to get more trips per day with your present delivery equipment.

The Geo. Haiss Mfg. Co., Inc.
146th St. and Rider Ave., NEW YORK CITY



PLYMOUTH CLAY PRODUCTS CO.

FORT DODGE, IOWA

PLYMOUTH GYPSUM CO.

FORT DODGE, IOWA

Manufacture what is known as **QUALITY BRANDS**
ORDER A CAR AND BE CONVINCED

Plymouth Plaster & Finishes	White Sand Float Finish
Plymouth Wood Fibre Plaster	Best Bros. Keene's Cement
Acolite Cement Plaster (the long keeper)	Sackett Plaster Board
Exterior Plaster	Tiger Brand Hydrated Lime
Fireproof Gypsum Partition Tile	

Write for advertising matter and prices

BRANCH OFFICES: {1015 Lumber Exchange, Minneapolis
5040 St. Lawrence Ave., Chicago

NORTH-WESTERN PORTLAND CEMENT



The Reliable Portland Cement

A Portland Cement for the
NORTHWEST

**North-Western States Portland
Cement Co.**
MASON CITY, IOWA



Dealers Everywhere—

YOU SHOULD HANDLE Monarch Brand Hydrated Lime

Because it's the only perfect Hydrated Lime and you can get increased business by recommending it. It's uniform. It's fine. It won't "blister" or cause "chip cracks" and "crazing."

You get the benefits of Monarch advertising service. You get the business that others are getting now.

Don't neglect this chance to increase your lime sales.

Ask us how we can help you sell Monarch Hydrated Lime. Write us that you want to be a "Monarch" man.

National Lime & Stone Co.
CAREY, OHIO



Investigate and you too will say *Kissel*

IN the haulage of crushed stone, sand, gravel and other heavy and bulky loads, 3½ to 4 and 6 ton KisselKar Dump Trucks are giving conspicuous service.

Staunch, sturdy, powerful and reliable, these trucks make sixty minutes yield the fullest hour.

Investigate and you, too, will say that on its actual record of performance, a KisselKar Truck in one of its seven sizes, is the truck that will best suit the demands of your work.

KISSELKAR TRUCKS

SEVEN SIZES

Owners of KisselKar Trucks are invariably truck enthusiasts. We would like to have you know their experiences.

We would like to have them tell you of the great dependability and economy of their trucks.

Ask us who are using KisselKar Trucks in your line—then write to them. Also say you would like a copy of our new portfolio with 500 illustrations—it will interest you.

Kissel Motor Car Co., 548 Kissel Ave., Hartford, Wis.

New York, Boston, Philadelphia, Chicago, St. Louis, Milwaukee, Minneapolis, St. Paul, Dallas, San Francisco, Los Angeles, Oakland, Cincinnati, Omaha, Cleveland, Detroit, Toledo, Columbus, Rochester, Buffalo, Baltimore, Pittsburgh, Duluth, Dayton, New Orleans, Nashville, Hartford, Conn.; New Haven, Troy, Norfolk, Providence, Marshalltown, Ia.; Madison, Montreal, Toronto, Calgary, Victoria and three hundred other principal points in the United States and Canada.

Better Profits

You can get a better profit on cement when you sell Marquette Portland. The green guarantee tag on every bag enables you to do this.

Marquette Cement Mfg. Company
1335 Marquette Building Chicago



"Concrete for Permanence"



It is a fact that the contractors who are using the most "CHICAGO AA" Portland Cement, are the ones who have been using "CHICAGO AA" longest.



The permanent plaster for interior walls. May be re-tempered as often as necessary. Makes a perfect bond on concrete, brick, tile or lath.

**Best Bros.
Keene's Cement**
The Plaster That Stands
Hard Knocks

The Best Bros. Keene's Cement Co.
Established 1889
Dept. A, MEDICINE LODGE, KANSAS
New York—Chicago

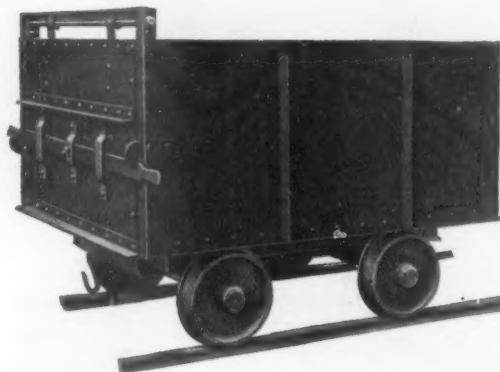


Tell 'em you saw it in ROCK PRODUCTS AND BUILDING MATERIALS



What a Quarry Car Should Be

To answer the demands of quarry usage, strength and durability are the essential qualities. As specialists for 18 years in the development of small steel cars, we are in a position to offer you the utmost in quarry car value.

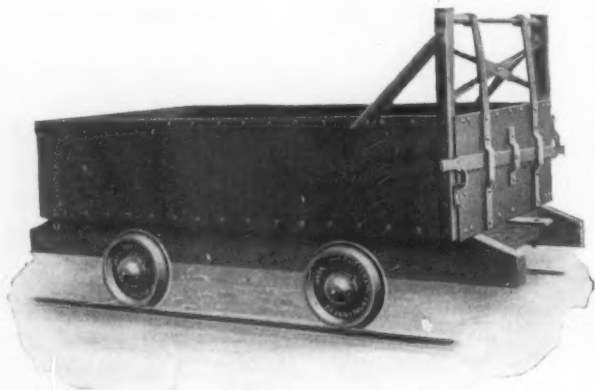


Lakewood Quarry Car No. 258

With heavy oak frame with side rails extended, forming bumpers at each end. Steel body with swinging end gate. This car is equipped with heavy chilled self-oiling wheels and continuous draw bar. Brake may be added if desired.

Lakewood Quarry Car No. 253

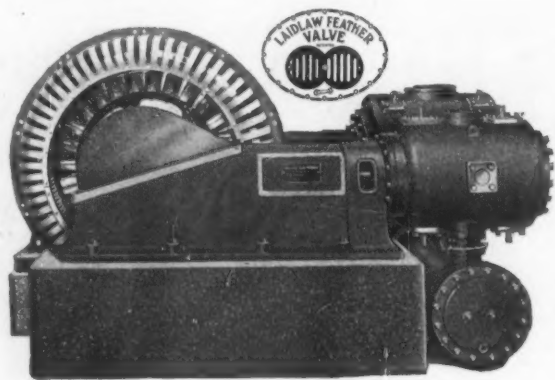
Built entirely of steel, is well braced and has swinging end gate. Heavy chilled wheels and self-adjusting bearings are furnished on this car. It can be equipped with brake if desired.



Write today for our Catalog No. 10

The Lakewood Engineering Company

Cleveland, Ohio



LAIDLAW Feather Valve COMPRESSORS

include features which greatly increase the return heretofore possible for money invested. These machines have established notable records for low operating costs.

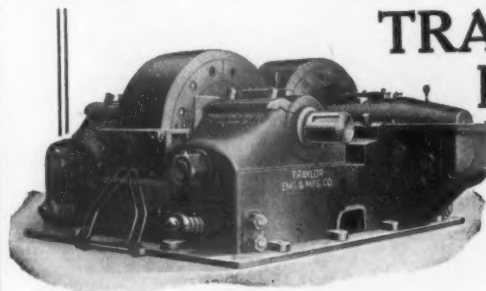
Described in detail in Bulletin L-530-58.

Write for a copy

International Steam Pump Co.
Laidlaw-Dunn-Gordon Plant

115 Broadway, New York Works: Cincinnati, O.
Branch Offices in All Principal Cities

L281.2



TRAYLOR ROLLS

For Fine
Crushing

By using Traylor Crushing Rolls you can count on large tonnage and low cost in the production of sand from your quarry.

Traylor Crushing Rolls are built to give maximum service under all conditions.

Our Automatic Lateral Adjusting Device, together with Removable Bushings, Hold-Down Mechanism and Dust Proof Bearings reduce the operating cost to almost nothing.

Send for
Catalog "G-2"

We are crushing experts, having designed some of the largest crushing plants and crushers in the world. Our services are at your disposal.

Many features embodied in the design of our rolls are worthy of your investigation. Consult our Engineering Department as to your requirements.

Catalogue G-2 is full of interesting details. Send for it now.

TRAYLOR ENG. & MFG. COMPANY

Eastern Office
24 Church St., New York City

Allentown, Pa.

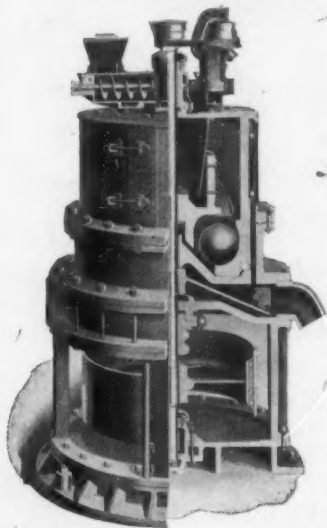
Western Office
Salt Lake City, Utah

Tell 'em you saw it in ROCK PRODUCTS AND BUILDING MATERIALS

The Fuller-Lehigh Pulverizer Mill

A Complete Self-Contained Unit

The most economical mill for producing
Agricultural Limestone



Reduces lump rock to
20, 40, 60, 80, 100,
or 200 mesh.

Requires no outside ac-
cessory equipment.

Requires no overhead
shafts, drives or
screens.

All material discharged
from mill is finished
product.

No inside journals or
bearings.

No inside lubrication.

Uniform feeding sys-
tem.

Constant and free dis-
charge.

Low installation cost.

Low operating cost.

Low lubricating cost.

Dustless operation.

Built in sizes to meet the requirements of your trade. Grinds
rock to meet the specifications of all Agricultural Experiment
Stations.

SEND FOR CATALOG NO. 70

Lehigh Car, Wheel & Axle Works

Main Office and Works:

Catasauqua, Penna.

Quarry Problems are Solved

by a crusher that is protected in all its wearing parts

The bed of the

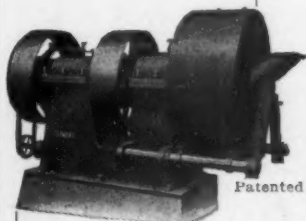
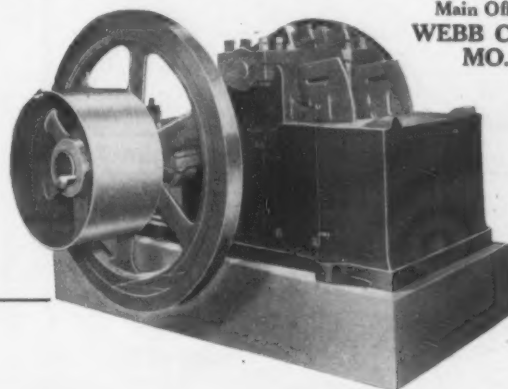
Blake Type Crusher

is protected by false removable wear-plates on either side of
the jaw-bumper, held in place by bolts through the bed,
which not only protects the bed, but insures a firm seat for
the side plates. To overcome the fact that the bed be-
comes worn immediately behind the side-plates, and sand
and other gritty substances work in between the sideplate
and the bed, we have inserted a false plate between the
side-plate and the bed, held securely in place by bolts
through the bed. These false wear-plates are not employed
in the construction of any make of crusher other than ours,
being fully covered by our patents.

By the use of these false wear plates we have a crusher that
is absolutely protected, prolonging the life
of the machine indefinitely

Webb City and Carterville Fdry. and Machine Works

Main Office
**WEBB CITY,
MO.**



Patented

Eventually—
Symons Disc

ROCK CRUSHERS

*Symons
Disc*

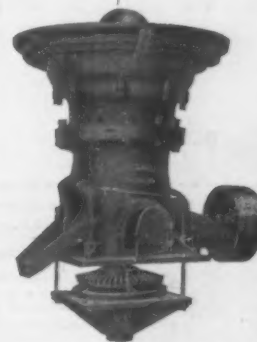
*Improved
Jaw*

*B. B.
Gyratory*

Manufactured and sold only by

CHALMERS & WILLIAMS

CHICAGO HEIGHTS, ILLINOIS, U. S. A.



Patented

There Is Money in Pulverized Limestone

It Is Used by the FARMER, the ROAD BUILDER and the CONCRETE WORKER

You can produce
it at low cost in an

All-Steel K-B Pulverizer

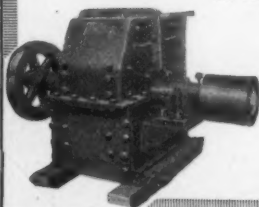
Whose capacity is high and upkeep is low

Write us today for full particulars

Our Engineering Department is at your service

K-B PULVERIZER CO., Inc., 86 Worth Street, New York City

"BUILT FOR SERVICE AND DURABILITY"



Tell 'em you saw it in ROCK PRODUCTS AND BUILDING MATERIALS

Sell Tiger Brand for

1. Plastering

Tiger Brand will not pit or blister in the white coat and gives a sound-deadening, fire-resisting base coat. 5,000 architects know this thru our persistent advertising.



HYDRATED LIME

2. Bricklayer's Mortar

35 per cent Tiger Brand Hydrated Lime in the mortar makes it spread easier, speeds up the work and permits the use of more sand. Every bricklayer knows this.

3. Concrete Reinforcement

10 per cent Tiger Brand hydrated lime makes concrete denser, more waterproof and stronger. We have been telling this fact to 12,000 concrete engineers and workers for three years.


Tell the trade that you sell "Tiger Brand"

The Kelley Island Lime & Transport Co.
Cleveland, Ohio

? ARE YOU A LIME, CEMENT, STONE, ? OR SAND AND GRAVEL PRODUCER ?

Our Service is for You We are Engineers—Designers of Sand and Gravel Washing Plants—Manufacturers of Dull's Tubular Washer, Cableway Excavators, Screens, Conveying Equipment, Pulleys, etc.
See our full page advertisements in the previous and next issue of ROCK PRODUCTS AND BUILDING MATERIALS, or write today to our Chicago office.

The Raymond W. Dull Company, 1912 Conway Bldg., Chicago, Ill.

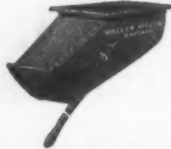


WELLER-MADE

DELIVERY GATES
Undercut Plain Overcut Duplex
or Special

SCREENS :: ELEVATORS
Everything for handling Sand, Gravel and Crushed Stone

Weller Mfg. Co., Chicago





**CWG
PRODUCTS**

Floor Hardener
Damp-proof Plaster Bond
Damp-proof Coating
Stone Backing
Weather-Wear Roof Coat
Ceresitol

**Waterproofing
Compound**

Send
for literature and
prices

Ceresit Waterproofing Co.
924 Westminster Building Chicago

Tell 'em you saw it in ROCK PRODUCTS AND BUILDING MATERIALS

LEHIGH CEMENT

The Sign of Good Judgment

You judge a man by the clothes he wears—by his personal card.

Consciously or unconsciously your customers estimate you by the appearance of your yards and teams, and by the signs on your warehouse.

You have come to the time of year when business slackens—when you can weigh and judge those things which will help or hinder the increase in your future sales.

Highest quality of product? Certainly! But let it be a product that is nationally known. Let even the sign on your warehouse be recognized as one of good judgment.



CONCRETE FOR PERMANENCE

MILLS:

Ormrod, Pa.; West Coplay, Pa.; Foglesville, Pa.; New Castle, Pa.; Mitchell, Ind.; Mason City, Ia.; Metairie Falls, Wash.

OFFICES:

Allentown, Chicago, Spokane, New York City, Philadelphia, Boston, Minneapolis, Savannah, Des Moines, New Castle, Buffalo, Pittsburgh.

12 Mills—Annual Capacity Over 12,000,000 Barrels

NOV 17 1915

CLB343237

Rock Products and BUILDING MATERIALS

INCORPORATING DEALERS BUILDING MATERIAL RECORD

Volume XVII.

CHICAGO, NOVEMBER 7, 1915.

Number 1

PUBLISHED SEMI-MONTHLY.

DEVOTED TO

Quarry Products, Cement, Lime, Plaster, Sand and Gravel, Clay Products and Building Specialties—Fireproof Building and Road Construction.

THE FRANCIS PUBLISHING COMPANY.

EDGAR H. DEFEBAGH, Prest.

Seventh Floor, Ellsworth Bldg., 537 So. Dearborn St., Chicago, Ill., U. S. A.
Telephone: Harrison 8086, 8087 and 8088.

EDITORS:

EDGAR H. DEFEBAGH. FRED K. IRVINE.

GEORGE A. OLSEN, Editor Retailers' Section.

H. F. AKE, Secretary.

DRUSUS H. NICHOLS, Advertising Manager.

Communications on subjects of interest to any branch of the industry are solicited and will be paid for if available.

Every reader is invited to make the office of Rock Products and Building Materials his headquarters while in Chicago.

Editorial and advertising copy should reach this office at least five days preceding publication date.

TERMS OF ANNUAL SUBSCRIPTION.

In the United States and Possessions.....\$1.00

In all other Countries in the Postal Union.....\$1.50

Subscriptions are payable in advance, and in default of written orders to the contrary, are continued at our option.

Advertising rates furnished on application.

Published on the 7th and 22nd of each month.

Entered as second-class matter July 2nd, 1907, at the Postoffice at Chicago, Illinois,

under act of March 3rd, 1879.

Copyright, 1915, by E. H. Defebaugh.

With pronounced improvements in collections and a continuance of fair weather, building material dealers have an opportunity to increase their averages for the season's business.

With highway associations at work in all sections of the country demanding large appropriations from the various legislative bodies, the year 1916 should result in the consumption of large quantities of road making material.

The promotion of cement by the Association of American Portland Cement Manufacturers has resulted in the establishment of numerous cement products plants in all parts of the country, the output of which is consumed by the natural demand growing from a display of these articles.

The ever advancing price of good draft horses, to say nothing of the prices of feed, has increased the cost of hauling per ton per mile perceptibly. The auto truck has proved to be the only savior of the situation to keep the cost of delivery in reason. Road contractors in every part of the country have recognized the value of tractor haulage that gets the material to the job instead of depending on country teams like they did in times past.

Did it ever occur to you that if the classifications which are being amended by the railroad committees were to go into effect many times without conferences on them, that your business would be wound up within twelve months? It is not so much a reflection on the railroads as it is a reminder to business men of America that what is everybody's business is nobody's business. If you do not keep your weather eye out the advances in rates will apply on your goods the same as on others—a 7 per cent to 40 per cent advance—and you know what that will do to your industry.

The use of hydrated lime in concrete mixtures is making good in practice. It is a growing feature with the most intelligent cement users.

The lessons on permanent construction taught by the hurricane which recently destroyed much property in Gulf coast communities should not be lost now that the terrible toll of life and heavy loss of property is becoming a well-settled fact. To properly safeguard against wind and rain, fire and frost, and even age, one must use materials which have been tried and found not wanting.

That season of the year when demands for building materials no longer exist and retailers are prone to forget business and take their usual winter vacations is rapidly approaching. The question that prompts itself in the breast of every progressive retailer is "How can I make the winter months pay?" The many suggestive answers include the addition of side lines such as coal, builders' specialties and the manufacturing indoors of cement products. The question, however, which naturally must be solved during the winter months and which is advisable to consider at this time is "How shall I prepare for next year's business?" Improvements to be made and lines to be added are well worth considering during the dull months of the winter when sufficient time and attention can be given them.

The exodus of foreign reservists who have been working in the quarries and the mills has been an eye-opener to many employers who have imagined that these people seriously consider their naturalization papers. Few, if any, of the foreign governments recognize our liberal admission to citizenship of their subjects. While we properly consider them as American citizens, neither does the foreign government nor the foreign individual give the matter any serious consideration. The Italian, French, Hungarian or German reservist still recognizes his call to the colors, and whether in peace or in war when he returns to his native land he is just as much of a citizen as he was at the time of his birth. The trivial formalities and only half understood oath of allegiance go for naught as against innate racial leadings. If the matter of acquiring citizenship could be made considerably more difficult and very much more solemn and impressive it would help in the case of the individual. It is nothing short of a very bad political condition that foreign powers are not made to recognize and abide by whatever method of adoption we institute. Nearly all of the very bad features of our troublesome labor disturbances spring from the foreign element, too promptly and too easily adopted into our citizenship. None but citizens should be allowed to have any voice in such matters, and the terms of receiving foreigners reasonably safeguarded so that none but those with reasonably desirable qualifications could be admitted. At least the qualification of fully comprehending the oath should be indispensable. Such indeed is the law at the present time, but almost 90 per cent of those now taking out naturalization papers are either incapable of being bound by the oath or do not comprehend any of its qualifications and obligations. Usually they are railroaded in gangs so that they can cast their first vote at least for the benefit of some transiently interested party who boosts them through. The present shortage of foreign laborers, who have long enjoyed regular employment, and been the dependence of heavy contractors brings the full truth of this situation into clear view.

WITH YOU and ME

E. A. Foster, of Samuel Cabot, Inc., Boston, Mass., is on a western trip.

W. J. Gilbert, of the Chicago Fire Brick Co., Chicago, Ill., is out of town in the interest of his firm.

J. E. Zahn, secretary and treasurer of the United States Portland Cement Co., with offices at Denver, Colo., was a Chicago visitor last week.

At a recent meeting of the Philadelphia Master Builders' Exchange, the Penn-Allen Portland Cement Co., 542 Widener building, was admitted to membership.

C. R. Harrison, formerly with the Globe Machinery and Supply Co., Des Moines, Ia., has accepted a position with the Auburn Brick & Tile Co., of Auburn, Ia.

Brick manufacturers and other members of the Oakland (Cal.) Contractors' Association went to San Jose on Sept. 21 to attend the first annual banquet given by the Building Trades Employers' Association of Santa Clara county.

Members of the building trades committee of the Memphis Business Men's Club, of which P. A. Gates is chairman, recently visited Marianna, Ark., as the guests of the commercial organization of that city.

J. F. Twamley was elected a member of the board of directors and second vice-president of the Bath Portland Cement Co., at a meeting of the directors of that firm held in New York City, Oct. 27. Mr. Twamley's headquarters are at 1182 Broadway, New York City.

At a meeting of the Clayworkers' Safety Association, held recently, Charles A. Millar, past president of the Canadian National Clay Products Association, was appointed inspector of clay plants in connection with the carrying on of the Workmen's Compensation Act for the Province of Ontario.

D. M. Kirk, principal owner of the Crescent Portland Cement Co. at Wampum, Pa., has bought the Davison farm near that place and is erecting a large number of homes for his employees. It is possible that the company may extend its operation on to the new tract and plans will be prepared for an addition soon.

The speaker at the Pittsburgh Builders' Exchange luncheon Nov. 4 was J. W. Hartley, of the United States Fidelity & Guaranty Co. His subject was the "New Workmen's Compensation Law." The Boosters' Club had arranged for special music for the luncheon, as they now have a piano in the Exchange rooms.

The Atlas Portland Cement Co., has opened a New England office at 68 Devonshire street, Boston, Mass., where all business of that territory will be transacted hereafter. The organization, which has heretofore comprised the cement department of Waldo Bros., Inc., has become affiliated with the Atlas company. The appointments for this office, as announced by C. A. Kimball, sales manager, are E. W. Clark (formerly of Waldo Bros., Inc.),

New England manager, and F. G. Conkling, New England sales manager.

H. M. Bennett, president of the Independent Brick Co., of San Francisco, spent a few days in Sacramento recently closing a deal for the purchase of the plant of the Sacramento Sandstone & Brick Co. of that city. The Sacramento plant has been shut down for several months, but will now be reopened and operated under the personal supervision of Mr. Bennett, who will remove to Sacramento.

The Lehigh Portland Cement Company, Allentown, Pa., announces with regret the retirement of Edward S. Larned from the position of manager of sales for the New England states. Mr. Larned is well and favorably known to engineers, contractors, and building material dealers. He is looked upon as an expert in the use of cement, both from a technical and a practical standpoint. Mr. Larned has not yet made known his plans for the future, and maintains his address at the City Club, Boston, Mass.

The Idaho Lime Co., and F. T. Crowe & Co., of Spokane, Wash., have announced the consolidation of their sales departments in a new company known as the Consolidated Supply Co., with offices at West 1310 Ide avenue, Spokane, commencing Oct. 18. According to J. H. Evans, president and manager of the new company, the Consolidated Supply Co. will carry the most complete line of building materials, specialties and contractors' supplies to be found in the Inland Empire.

Building material interests were well represented at the recent world's championship baseball games. The instigator of the plan to bring dealers and manufacturers together at these post-season games

is E. A. Foster, of Samuel Cabot, Inc. Just before this year's game, Foster wrote John Voelkel, of New Orleans, to meet him in Philadelphia. The party met in Bert Swett's office and included Messrs. Kelley and Classen, of Baltimore; Kelley, of Providence; Maxwell and Kimball, of the Atlas; Tyson, King, Bruff and Swett, of the Lehigh, and others. The games were enjoyed until Sunday, when Swett took Voelkel over to Allentown and showed him how to lose golf balls. It is reported that the Crescent City dealer was very much peeved before at losing three balls, but when he met a fellow who had lost seven the first time he played, Voelkel became a little cheery. The ease with which Foster took all available money last year put Voelkel on his best moral behavior last month and the Bostonian was forced to take his expenses from the Philadelphia enthusiasts among the Lehigh crowd.

F. Codman Ford, head of the building material firm of that name in New Orleans, has labored unceasingly during the past three years in an effort to have Congress establish life-saving stations on the shores of Lake Ponchartrain, a body of water that surrounds New Orleans on one side of the city. Lake Ponchartrain is a comparatively insignificant body of water, whose unruffled surface laps the very edge of the city. But occasionally storms arise, and woe be to any frail craft caught far from land. A family, the Brunings, called the "brave Brunings," who have lived for years by the lakeside, constitute the only life-saving force at present, and it is claimed that more than a hundred lives have been saved by them in the last score of years. It was the Bruning brothers who saved the life of F. Codman Ford, Jr., more than a year ago, when the lad was caught on the lake in a frail craft during a blow. It has long been the pet ambition of Mr. Ford, Sr., to establish a life saving station at Bucktown, at the upper end of Lake Ponchartrain, with the Brunings in charge, and other stations at various other portions of the lakeside.

I. J. Weatherford, sales manager of the Nebraska Material Co., has been compelled by his manager, J. H. Allen, who is also president of the N. B. S. A., to spend an extended vacation at the Woodmen's sanitarium, near Colorado Springs, Colo. Weatherford has been ailing for years and should have taken a vacation long since but as he seemed to have a constitution of iron and a will as determined as steel he has refused to break away from the office in order to improve his condition of health. After spending a week at the sanitarium, a letter to ROCK PRODUCTS AND BUILDING MATERIALS, which described in detail the beautiful scenery in that vicinity, states that the doctors declare his health to be much improved. Weatherford is styled by men in the building industry who know him, as "a real salesman." With Weatherford, it is not necessary to refer to the price list or files; he can without hesitation quote accurate prices and give the exact dimensions of the various materials carried by his company. In addition to being a salesman, he is also an engineer. This combination has made him a valuable man to the Nebraska Material Co.

S. Roland Hall, advertising manager of the Alpha Portland Cement Co., of Easton, Pa., in a recent

Scheduled Shows and Meetings.

Nov. 17-18—National Industrial Traffic League, annual meeting, Congress hotel, Chicago.

Dec. 7-8—The Sand Lime Brick Association, annual meeting, Republican House, Milwaukee, Wis.

Dec. 8-10—American Face Brick Association, annual meeting, Chamberlin hotel, Old Point Comfort, Va.

Feb., 1916—National Lime Manufacturers' Association, annual meeting, Cleveland, Ohio.

Feb. 8-9, 1916—Chamber of Commerce of the United States, annual meeting, Washington, D. C.

Feb. 12-19, 1916—Ninth Chicago Cement Show, Coliseum and Armory, Chicago, Ill.

Feb. 15-16, 1916—Ohio Builders' Supply Association, annual convention, Cleveland, Ohio.

Feb. 15-17, 1916—Illinois Lumber and Builders' Supply Dealers' Association, annual meeting, Sherman hotel, Chicago.

Feb. 15-18, 1916—Second National Conference on Concrete Road Building, Auditorium hotel, Chicago, Ill.

Feb. 16-26, 1916—Complete Building Show, Coliseum, Cleveland, Ohio.

Feb. 17-19, 1916—National Builders' Supply Association, annual convention, Statler hotel, Cleveland, Ohio.

Feb. 29-March 4, 1916—Tenth Annual Mid-West Cement Show, Omaha, Neb.

talk before the Poor Richard Club of Philadelphia, pointed out the importance of advertising to cement dealers and to persons with whom they deal. The subject of Mr. Hall's address was "Abstracts from the Concrete," and in the course of his talk he referred to the fact that within recent years builders of roads have largely adopted cement for their material in place of planks and other materials formerly used in the construction of highways. He stated that through the columns of newspapers and magazines his and other cement firms have taught the public that to make automobile riding enjoyable, concrete roads were essential. He also declared that the heavy loads transported over the roads in modern times necessitated building these roads of durable material. The world is gradually learning, he said, that roads of the European type, the latter of which are now being given the severest possible tests, are the only roads that can hope to stand the strain of modern years. Mr. Hall's address was the first of a series of educational talks to be given for the benefit of members of the Poor Richard Club.

The corner stone of the new ceramic engineering building of the University of Illinois, Urbana, Ill., was laid the latter part of September and was the means of calling attention to the clay, cement and glass industries and the interest taken by the university in this work. The building is designed to accommodate that portion of the instructional and research work of the university which deals with the fabrication of clay products, cement and glass, according to officials of the institution. The importance of activities in this field is increased by the fact that the raw materials involved, while of but little value in themselves, are through the expenditure of labor and the use of fuel converted

into products both of utility and beauty. Moreover, the clays and rocks constitute so extensive a resource that their utilization occasions no appreciable loss in the natural resources of the state. Clays, limestone, sandstone and sands together with small amounts of other minerals may be made to yield many different products ranking in character from the common brick to the more ornate terracottas and the most exquisite porcelains. They are the sources of Portland cement which has become an indispensable material of construction, and they are also the sources of glass in its hundreds of forms.

Employers' Liability—Where Does It End?

Milwaukee, Wis., Nov. 4.—A decision of interest to employers in every state where workmen's compensation laws are in operation has been handed down by the Wisconsin Supreme Court, which would seem to greatly increase the liabilities generally supposed to exist under compensation acts. The opinion, given by Justice Siebecker in the case of the New Dells Lumber Co., of Eau Claire, Wis., holds that typhoid fever contracted by an employee through drinking water furnished by the employer and resulting in the death of the employee, is an accident within the meaning of the workmen's compensation act.

This decision is probably the most far reaching of any announced by the Wisconsin court since the compensation law was enacted. Chief Justice Winslow and Justice Barnes dissented from the majority opinion. Justice Barnes saying in part:

"The compensation act as now construed by the court, will, I think, add materially to the liabilities popularly supposed to exist under the act, if it does

not double them. If the legislature so intended, well and good. I cannot bring myself to believe that it did so intend."

Gerhardt Vennen, an employee of the New Dells Lumber Co., died of typhoid fever, after drinking water at the plant of the company. His widow sued for \$10,000 damages, alleged to have been sustained because of the death of her husband and also \$10,000 in behalf of the estate of the deceased for the benefit of his heirs. Ex-Attorney General Sturdevant, appearing for the lumber company, contended that the company was operating under the workmen's compensation law and that the death benefit should be paid according to the terms of the law. This would limit the total settlement to \$3,000. Daniel H. Grady, Portage, appearing for the plaintiff, declared that the compensation act did not apply and that Mrs. Vennen was entitled to unlimited damages.

J. D. Beck, chairman of the Wisconsin Industrial Commission, which administers the compensation law, said that the decision of the Supreme court will not increase the burden of employers, as Justice Barnes declared in his dissenting opinion; and that it confirms the commission's ruling previously made by the commission.

Wisconsin workmen during the year ending June 30, 1915, were paid \$1,350,000 under the workmen's compensation act, according to the annual report of the Wisconsin Industrial Commission. During the four years that the law has been in operation the number of employers who have elected to come under its provisions, has increased from 61 to approximately 13,000 and the number of employees within its protection has grown from 17,000 to more than 250,000. In fact, during the past year, 99.5 per cent of all industrial accidents were subject to compensation.

A SERMON ON CO-OPERATION



WOH!



H-U-U-M!



YUM!



YUM!



WHICH?



HOW?



WHEN?

Cut Used by Courtesy Safety and Relief Department of the Illinois Steel Co.

The RETAILER

High Cost of Handling Building Materials

Crude and Primitive Methods Employed in Yards Where Large Quantities of Supplies Are Handled—Economical Methods Greatly Reduce Operating Expense.

Careful investigation shows the average building material company which handles large quantities of sand, gravel and crushed rock to be employing crude and primitive methods in its yards which cannot help but result in a high percentage of waste as well as high labor cost. Such firms have failed to keep abreast of the times, and like the average lime and brick manufacturer, they follow the lines as laid out by the originator of the industry.

A vast majority of the lime output is produced in the same crude open kilns as were used 100 years ago, using wood or coal, directly fired, and getting only about 15 per cent efficiency, and the brick manufacturer still employs the same crude open kilns which permit 90 per cent of the heat generated by his fuel to go to waste in the atmosphere. However, some progressive companies, after wasting a fortune, have adopted scientific methods which not only prove economical but produce a better grade of product.

The lumber, cement and steel product people seem to have adopted scientific methods years ago, and evidently the great progress made by them was due to the close relationship, organization and coöperation which resulted in an exchange of ideas, research work and, finally, the adoption of improved methods.

Approximately 85 per cent of the sand, gravel and crushed stone used in construction work in the cities is handled by hand. Not only is this true, but 65 per cent is shoveled by hand from the car into storage, and from storage into the wagon for delivery. Very few of the yards are paved, which results in an extraordinary amount of waste, requiring an excess of time for the team and driver

and often requiring a double team to haul the load from the yard to a paved street.

Many of the plants have hundreds of yards of sand and crushed rock scattered over the driveways and about the yards in such a manner as to prevent its sale, which not only means a total loss, but prevents efficient operation. Many of the plants are also without any system of bins, or a system which will prevent the sand pile ends from being overlapped by gravel, which causes another great loss. There seems to be no systematic way of unloading, and if a car happens to be set at the wrong place, the product is unloaded on the ground, or in any manner just so it is unloaded, evidently to prevent payment of demurrage.

Erroneous Ideas About Improvements.

The problem could be solved in many ways, but the firms employing the most inefficient methods are naturally the ones who think they can least afford to make improvements, when, as a matter of fact, they are the ones who can least afford to be so wasteful. Some financial institution backs every building material company, and it would save all parties interested a great amount of worry if the plant was equipped with efficient methods of handling the material and saving what at present amounts to a great loss. It would mean a safer and more profitable investment for the financial men back of the enterprise, and would be more attractive and satisfactory for the owner.

Many different types of equipment can be used in a profitable manner in this work, but it is not all in the type of equipment, but rather in properly designing the plant according to the location and equipping it in the most economical manner for the

most efficient operation. Plants handling all kinds of building material should have departments for each variety. Supplies, such as brick, should be handled in a separate and distinct yard from sand and gravel, and the cars should be set so one would not interfere with the other. Cement, lime and similar materials should be given a space of their own. The unloading should be for through routing to the delivery, so that no material would be conveyed in opposite directions, or backward and forward.

Rehandling Is Expensive.

It requires great energy to move a ton of product, and energy costs money and the cost multiplies with each foot pound required. Teams and drivers should not be detained a minute longer than necessary, as the cost of delivery multiplies with every minute lost; hence, there are many different points to be carefully considered in the adoption of economical methods for each plant.

Electric Trucks for Conveying Brick.

Each department should be equipped and laid out to insure the maximum efficiency. In the face brick department the unloading platform should be level with the floor of the car, so that an electric storage battery truck could have easy access to the car. A properly constructed truck can enter the car so that no tossing of the brick would be required. All loaded trucks should have a down-grade haul to the storage or any part of the storage and an up-grade for the empty return car. The driveway on opposite side of the car from the storage should be paved and permit easy access of teams for loading wagons from the cars for direct delivery. The stock sheds should be laid out so that delivery wagons or

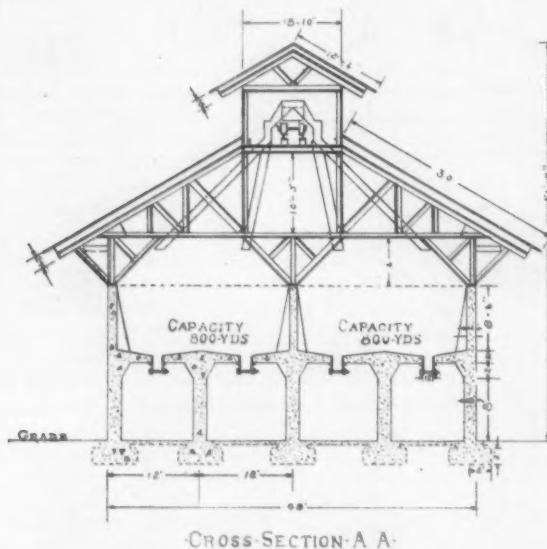


FIG. 3.

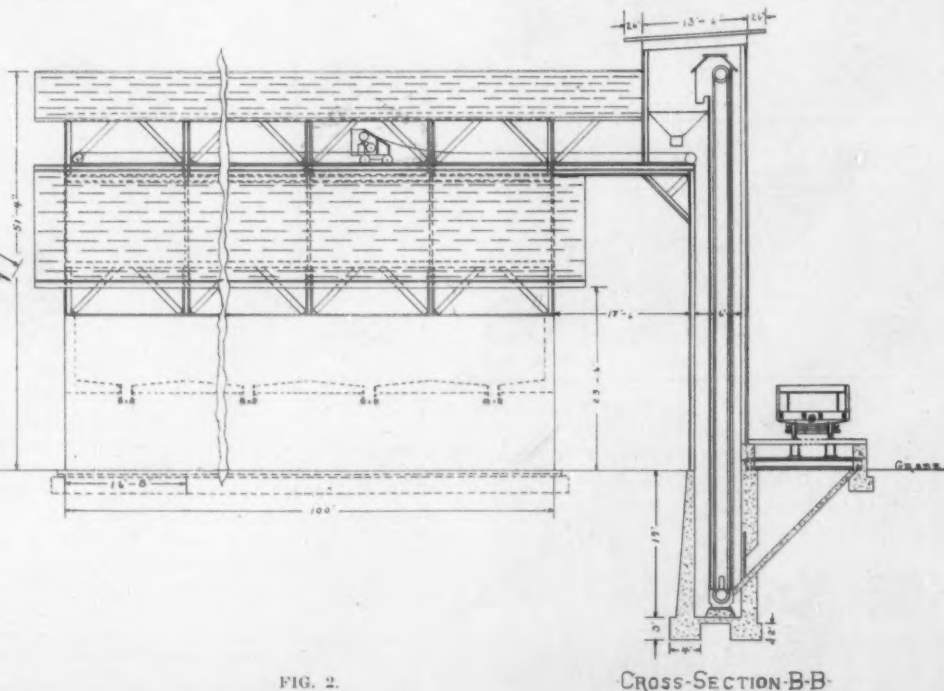


FIG. 2.

trucks would not interfere with unloading trucks. This can be accomplished by storing the brick in systematic piles and perfect formation and alignment with a driveway on either side, permitting the loading of the delivery for one side of stock while the storing is in progress from the other, reversing the process when necessary.

Sand Gravel and Stone Yard.

Illustration No. 1 (on front cover) shows the layout of a sand, gravel and crushed stone yard. It is simple and can be operated in the most efficient manner. The plant is entirely enclosed with railroad siding at one end and with office and scales at the other. The teams drive in at the side next to the railway, up a slight incline to the driveways under the storage. Passing to any part of the storage desired, the driver pulls a lever on the discharge spout, loads his wagon and drives on out to the scales with a down-grade pull the entire distance through the yard. This system will permit any driver to enter the yard at one side, load, drive to the scales, get his ticket and drive onto the street again in from five to ten minutes, eliminating all heavy manual labor, saving time and horse flesh. This illustration shows that the plant is equipped with two elevated storage bins divided into six sections, each equipped with four hopper discharges to each section. Hence, one storage bin could be used exclusively for crushed rock handling six different grades, while the other could handle as many different kinds of sand and gravel. For a small plant one bin could be utilized in handling three grades each of sand and gravel.

Illustration No. 2 shows a side elevation and cross section through the railroad track hopper and elevator pit. It will be seen that by the use of bottom dump cars one man could unload and clean a car of either sand or gravel in 30 minutes. This same man can start his motor, which drives the elevator and distribution conveyor, and permit the distribution to be in progress while the car is being unloaded. By this method a single man can unload and distribute 50 tons of material in one hour and eliminate all loss in the unloading and distribution process and at the same time placing the product in proper condition for efficient rehandling.

The distribution conveyor is equipped with an automatic tripper which can be set at any point for the distribution spouts, which have swivel outlets, permitting uniform distribution at any point desired.

Elevator Bins of Reinforced Concrete.

Illustration No. 3 shows the type of construction used in the elevated bins. This is composed of heavy reinforced concrete, with solid supporting walls on either side of the driveways. The whole is covered with light steel frame superstructure, covered with corrugated iron, which prevents weather conditions from interfering with operating conditions, as well as preventing freezing immediately after a rain during the winter months.

With this process there would be no loss in weight except that caused by evaporation of moisture during the storage period. Every pound of product shipped could be checked out to the customer at a minimum cost for handling. The plant could be fireproof with low depreciation and eliminating cost of fire insurance; hence, a safe investment upon a very profitable basis.

One of the most important features in efficient operation is the condition of the minds of employees; this condition depends largely upon environment. The employer controls the working conditions and at the same time expects the employee to produce maximum results, regardless of conditions. If operation expenses seem excessive, friction arises, resulting in inefficiency. Under ordinary present conditions the laborer is required to shovel sand by hand in all kinds of weather—perhaps the wind is blowing hard against him, almost blinding him with sand at every movement, or attempting to load out frozen sand or crushed stone, compelling the use of every pound of energy

while obtaining the minimum results. The driver, compelled to take special care of his team, is required to attempt to pull a heavy load through a yard filled with sand and gravel mixed to a possible depth of six inches, a mass of dust in dry weather or mud in wet weather, creating an excess friction load and at the best a deplorable condition.

But change the conditions—keep the plant in perfect operating condition, give the men a chance to perform their duty under common-sense working conditions and their work will be done in the most efficient manner. It means cooperation between employer and employee, the only common-sense method of handling labor.

Two Cents Per Ton Handling Cost.

Each section of a plant of this kind would readily handle or unload and distribute in the bins for loading out 50-ton per hour with one man.

If 40 cents per hour was paid the laborer and 3 cents per horsepower hour for the power, the total cost of handling 50 ton would not exceed \$1.00 or 2 cents per ton, besides eliminating the loss.

The same proportionate reduction cannot be made in the handling of lime, cement or brick, but at least 40 to 50 per cent of the ordinary cost can be chopped off.

The greatest waste, and one that strikes the poor the most, is the present method of handling coal. The tariff that must be added to the cost of coal due to the crude wasteful methods of unloading, storing, reloading and delivery must be enormous. And no industry in any city is as unsightly and as filthy as the coal business. Yet simple methods could be employed that would eliminate the great waste, high cost of handling and the unsightly object.

There should be a law created which would prevent the criminal waste of fuel. This could be done by starting at the mine, not only eliminating the waste, but eliminating the dust and dirt in handling, as well as the great volumes of smoke produced by its use. It would also result in the production of large quantities of valuable by-products, which are essential in our commercial world, and are highly profitable. It is a well-known fact that all high volatile coal, bituminous and lignite, produce large volumes of smoke if used as it comes from the mine, also that it is this quality of coal that contains the largest quantity of by-products, such as ammonium sulphate, tar oils which can be used in internal combustion engines, light oils such as benzol, cresylic acid and heavy tar oils from which dyestuffs are obtained. Then in the distillation or carbonization process large quantities of rich gas are produced which could be utilized in industrial work, or in the generation of commercial electrical energy.

All of these products, which are of tremendous value, can be produced from that part of the coal which is objectionable to the general use, and leaves the carbon free and clean, so that it can be handled and delivered to the consumer at the minimum expense in a clean condition.

ENTERS LUMBER BUSINESS.

The Carolina Portland Cement Co., incorporated under the state laws of South Carolina, with offices at Charleston, Jacksonville, Birmingham and New Orleans, are among the largest wholesalers of Portland cement, lime and plaster in the United States, and also carry a large line of rubber roofing, pitch, coal tar, tarred felt, building and sheathing papers, metal laths and all related building material.

The Carolina Portland Cement Co. has been doing business for 15 years and has an excellent trade in the states of North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Tennessee and Louisiana. They maintain offices and warehouses at Charleston, Atlanta, Birmingham, Jacksonville and New Orleans, with a large number of salesmen on the road, some of them making their territories in automobiles. All of their city sales-

men at their different offices and warehouses are provided with automobiles and are in splendid position to go after this particular line of business. During the past eight months, through their Atlanta office, the Carolina Portland Cement Co. has engaged in the wholesale lumber business in the states of Georgia and Alabama, and at the present time are putting on wholesale lumber salesmen to work the territory being handled by each office, and all of the offices will soon engage in the wholesale lumber, lath and shingle business in addition to the regular business of the company.

New Incorporations and Ventures.

The Lake Erie Builders' Supply Co., Cleveland, Ohio; capital, \$10,000; to deal in all kinds of building materials; incorporators, Perry F. Norton, George W. Stone, Charles F. Morgenstern, Sterling Newall and Joseph J. Perks.

The Wyatt Co., Henderson, Ky.; capital, \$10,000; to manufacture and deal in builders' supplies; McNary Wyatt, secretary and general manager; John J. Delker and Alfred G. Delker.

Schueler Bros. Co., Nashville, Tenn.; capital, \$15,000; for the purpose of carrying on a contracting business and dealing in building materials; incorporators, E. R. Schueler, F. R. Schueler, S. M. Hite, C. J. Eichberg and William Yeargin.

Premier Granite & Sand Co., Montreal, Quebec; capital, \$75,000; manufacture paving blocks, deal in building materials, crushed stone, sand and gravel.

The Letcher Building & Supply Co., Whitesburg, Ky.; lumber yard and building materials; E. W. and R. B. Franklin.

The Cincinnati Purchasing Co., Cincinnati, Ohio; capital, \$50,000; to deal in all kinds of building materials; incorporators, Leland C. Evans, M. C. Bollenberg, T. M. Craven, M. C. Brandeburg and C. F. Mayer.

Builders' Supply Co., Madisonville, Monroe county, Tenn.; capital, \$10,000; incorporators, M. C. King, C. L. J. King, Boon Crawford and A. B. McCay.

The H. P. Maughlin Co., Columbus, Ohio; capital, \$10,000; to manufacture builders' hardware and metal building material in general; incorporators, Erdis G. Robinson, Ernest W. Maughlin, H. P. Maughlin and M. E. Thrailkill and others.

The Robert Hicks Co., Petersburg, Ont.; capital, \$50,000; to deal in brick, cement, lime, plaster, stone and all classes of building materials, as well as carry on the business of building contractors. Provisional directors are Robert Hicks, A. E. Dawson and others.

The Elkhorn Brick & Supply Co., of Huntington, W. Va., has filed amended articles of incorporation increasing its capital stock from \$20,000 to \$40,000, for the purpose of enabling it to extend its business facilities.

S. & S. Building Material & Fuel Co., Chicago, Ill.; capital, \$10,000; incorporators, Louis H. Schuber, Frank Silha and others.

The Kinsman Builders' Supply Co., Cleveland, Ohio, recently began dealing in builders' supplies and lumber.

J. B. Johnson Co., Newport News, Va.; capital, \$15,000; building material; J. B. Warren, president; Frank R. Bartlett, secretary; J. B. Johnson, vice-president and manager.

Cullen Contracting Co., Port Washington, N. Y.; capital, \$5,000; building materials and construction; J. H. Cullen, Jr., 1 Broadway, New York, and others.

Syracuse Builders' Supply Co., Syracuse, N. Y.; capital, \$10,000; E. F. O'Connor, 830 Westcott street, and others.

A new retail concern at Latrobe, Pa., is the W. H. Baker Lumber Co., which is a reorganization of the retail firm of Connor & Baker.

Retailers Tried and Found Not Wanting

Following the equinoctial storm of Sept. 29, which damaged the Gulf coast territory and towns, retailers of building materials were presented with the unique position of holding in stock the essential requirements of mankind. The demand for supplies which naturally followed the destruction of property found the dealers of New Orleans in this enviable position, but with the exception of a number of junk dealers and unscrupulous laborers, who managed to secure possession of some of these supplies, actions of the dealers call attention to the respect in which they themselves hold the building material business and therefore the respect which it should receive from the public.

As a result of the New Orleans building code, which prohibits the use of the wooden shingle, much slate and prepared roofing materials are used in the Crescent City. It was particularly in the accumulation and sale of slate that a few unbusi-

ness-like firms brought themselves into bad repute by charging from seven to 50 cents a piece for slate. The shortage on this material was so serious that many property owners, unable to obtain roofing, substituted tarpaulins, tar-paper, and in some cases even bed blankets were used as temporary roofing. Not only were the prices of roofing materials boosted, but in some instances the price of other building materials was also raised. This aroused the ire of the legitimate firms doing business in New Orleans and under the leadership of the Hon. Walter F. Jahncke, a member of the firm of Fritz Jahncke, Inc., and President Herman H. Thomas, the New Orleans Contractors' & Dealers' Exchange investigated conditions and condemned the practice that sought to take advantage of the misfortunes of a stricken city.



WALTER F. JAHNCKE.

ERNEST LEE JAHNCKE.

PAUL F. JAHNCKE.

In this connection it is gratifying to report that not a single member of the exchange joined in the rush to boost prices. They advised property owners not to pay the increased prices and even advertised the fact that during the calamity there would not be an increase in the price of materials, regardless of the supply on hand. In this connection due exception was taken to a cartoon in the New Orleans Times-Picayune on Oct. 5, which represented a ruined householder bemoaning the loss of his damaged house. In the picture an eagle stands nearby bearing in his beak a placard which reads, "Extortionate demand for labor and material." The cartoon was labeled "Mark well the creatures who seek to fatten on our misfortunes."

At an open meeting of the Contractors' and Dealers' Exchange on Oct. 11, prompt action was taken toward giving quick temporary relief to persons whose residences were exposed to the rain in consequence of damaged roofs. Conspicuous among

against overcharges on contracting and building materials.

Nothing that could possibly occur would bring the general public to as full an appreciation of the value and importance of an organization such as the Contractors' and Dealers' Exchange as did the plan adopted and the action decided upon in the meeting of that body, action looking to the protection of that portion of the public who are householders and property owners against the unscrupulous dealers in building materials and the gouging contractor. The fact that the action taken was on the Exchange's own initiative, not solicited by any of those most at interest in the matter, will carry home to the public realization most forceful appreciation of the fact that in that organization they have a protective body of immeasurable value.

Jahnckes Aid in Rescue Work.

During the height of the storm and while assistance was most needed, two firms known as the Jahncke Navigation Co. and Fritz Jahncke, Inc., not only placed at the disposal of the residents of the city all of their resources, but the individual members thereof, namely, Walter F., Earnest Lee and Paul F. Jahncke, took command of the rescue work and sent their numerous boats and other facilities to points where they could be of the utmost help to their suffering fellow men. The morning after the storm, which revealed a community scarred by wind and wave, wreckage in ragged heaps, the slain at its doors tearing the heart of this big city, the survivors, imperiled in many places, destitute, hungry, lifting hands to the big city for aid, brought to light the fact that the S. O. S. call for this stricken humanity was heard and answered by the Jahncke fleet, which com-

prises scores of tug boats, launches, barges, schooners and yachts. A relief committee had not yet been formed. The city, safe and pulsing almost normally, had not gotten over its stun. But the Jahncke fleet, the whole of it except a few craft sunk or disabled by the storm, went forth on errands of relief without waiting for the request or command of a committee chairman.

The fast tugs, launches and yachts sought out the dead in the lakes, marshes, canals and rivers about New Orleans, carried refugees to safety, distributed clothing and provisions and medicines to the destitute. The pleasure boats, fitted up for society's fetes, became floating hospitals and emergency relief carriers. The "Glendoveer," "Lehigh," "Elk," "Jahncke," "Maid of Orleans," "Tiger" and others, sailed for Lake Catherine, the Rigolets, Bay St. Louis, Chef Menteur, Pass Christian, places reported to be heavily damaged, with people in distress.

Some persons importuned the Jahncke company for the hire of boats to run excursions, or to go on personal or business errands, but all offers were declined. The company was asked time and time again to take passengers on the relief boats, but because of a fear that they might hinder the relief work, these requests were turned down.

When the relief committee got organized all of the Jahncke boats were tendered to it, with their crews and masters.

With the aid of these boats the committee was able to rush food, water, medicine, doctors, to storm victims. Lives were saved because of the quick work done. Dead bodies got proper burial. Saturday evening (the hurricane took place on Wednesday) the relief committee had the rescue and relief work well in hand, the situation in each stricken locality pretty well sized up and food and provisions going out by boat, train and wagon.

New Orleans did not have to call on the outside world for aid, even though a score of her own citizens, and several hundred in neighboring territory had been smitten to death by the worst storm in her history, and thousands desolated of nearly all they possess. She did not even accept the aid generously proffered by a dozen or more cities.

Commodore Ernest Lee Jahncke, president and general manager of the Jahncke Navigation Co. and his brothers are the main reasons why.

All of the New Orleans newspapers commented on the activity of the Jahncke boys. The article appearing in the New Orleans Item of Oct. 5 is typical of the rest. Under the title, "Deserves City's Gratitude," this publication says:

Many men might be singled out for praise for what they have done, since the storm, to aid their fellow-men, sufferers by the havoc-wreaking hurricane; and if they were so singled out there probably would remain many times their number who in one way or another contributed like service equally deserving of public commendation.

It is no reflection, however, on any of those who, either in the midst of the blow or afterwards, distinguished themselves to mention by name "the Jahncke boys," to whom, as Mr. John M. Parker says, the whole community owes a debt of gratitude not easily to be paid.

The Jahncke Navigation Co., with vast interests in the devastated territory, itself was a severe financial sufferer. But the trail of the Storm King still was fresh Thursday morning when Commodore Ernest Jahncke, the head of the company, threw all the resources of his great organization into the work of rescue and relief.

The large fleet of Jahncke tugs and motor yachts, stocked with emergency rations, were started in various directions to rescue those still in peril, to relieve the immediate wants of the suffering, to minister to the sick and wounded, to bury the dead, to reunite anxious families, to move refugees to points of safety, and to do the sundry other things which a great emergency demanded.

And they have kept up this great humanitarian service for several days, refusing any compensation from those whom they served, and rendering the essential first aid to the stricken which was required until the city could organize permanent measures of relief.

To Commodore Ernest Lee Jahncke, to Walter Jahncke and to Paul Jahncke, for a public service discharged with conspicuous zeal and generosity, the community's thanks!

And the same to all who in like spirit rendered similar service, even if on a smaller scale, to those who were victims of Wednesday's hurricane!

IN THE WAKE OF THE STORM.

Commenting on the hurricane of Sept. 29, a number of dealers have written ROCK PRODUCTS AND BUILDING MATERIALS, as follows:

John J. Voelkel, president of the J. J. Clarke Co., Ltd., New Orleans, La.: We are pleased to advise

that our loss due to the effect of the hurricane was small, totaling in all about \$200. Our warehouse roof, which was of galvanized iron, was partly blown off, but was in such shape that we were able to replace it. Business, especially the roofing end, has been very good, and we must admit that the other end has been all that we could expect. The damage was confined mostly to unroofing (slates torn off) and chimneys blown down.

F. W. Salmen, secretary Salmen Brick & Lumber Co., Ltd., New Orleans, La.: I wish to state that our plant was damaged to the extent of \$15,000 to \$20,000, but was in operation three days after the storm. The repairs are in process at present. Damages to our New Orleans retail yards were very slight, indeed, and our business was not interrupted any. The storm did considerable damage to roofs and buildings in New Orleans, but same have all been repaired and New Orleans has shown herself to be one of the greatest cities of the age. The way that our mayor, Martin Behrman, down to the common laborers helped was marvelous, and our city is again normal and conditions are improving. Our plant was fully protected by tornado insurance.

The F. Gardner Hardware & Supply Co., Laurel, Miss.: The storm that struck the coast the last of September did not reach up this far. We had a hard storm at that time, but no damage. The building business has been very light in this locality this year. Our main crops are lumber and cotton, and the prices are getting better on both. Things look a little better at this time.

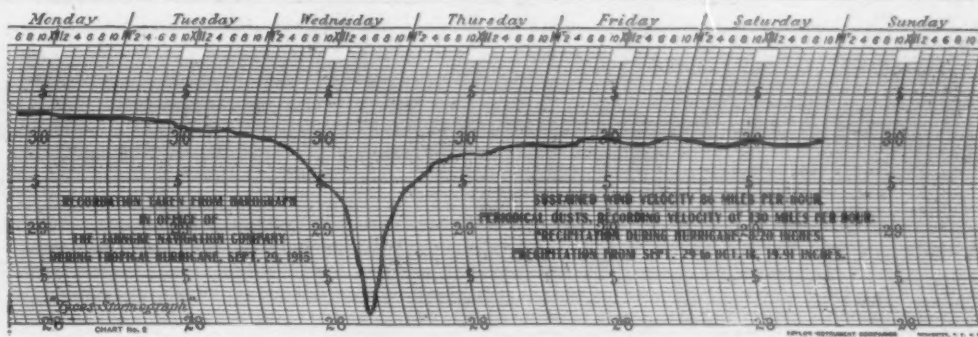
Acme Building Supply Co., Meridian, Miss.: The recent coast storm did not reach us with much damaging effect. While we had some wind and considerable rain, we suffered only slight damage.

J. L. Ballard, of the Bowie Lumber Co., Ltd., Bowie, La.: We are very happy to state that while there was a tremendous property loss in this section of the country at the time of the September storm, our peculiar losses were much lighter in proportion than some of our neighbors. The greatest we understand, was sustained by the sugar manufacturers, in having not only their crops laid down but in many instances their refineries badly damaged.

P. E. Chalifoux, treasurer of the Kirkpatrick Sand & Cement Co., Birmingham, Ala.: The recent storm which occurred along the lower Gulf section of the country did not affect this district whatever. In regard to the effect on business, our experience is that New Orleans business has been somewhat retarded; that is, work would have been started before this on the cotton warehouse, the cement for which, we are furnishing, if it had not been for the storm. We think, however, the recent storm will do a great deal of good, inasmuch as the wooden structures which have been demolished, will be replaced with concrete.

The Longview Lime Works, Birmingham, Ala.: The recent equinoctial storm only damaged the coast territory and towns and, therefore, our property was unharmed. We have not found any unusual impetus of business as yet from this section, as the L. & N. R. R. in particular, is unable as yet to make delivery to the points that suffered the worst damage. We are pleased, however, to advise that we are enjoying a good demand for our products, and notwithstanding the depression caused by the European war, we expect to ship more lime this year than in any previous year. We were recently awarded contract by the government to furnish them with hydrated lime for levee work along the Mississippi river, and this, together with out other demand, is keeping us quite busy.

J. M. Clark, of the Clark Building Material Co., Jackson, Miss.: The storm which we had recently did not reach this far into the interior, although we had considerable rain and wind of high velocity. You, no doubt, are familiar with conditions along the coast. This storm was much greater than reported on the morning following same.



RECORDATION TAKEN FROM BAROGRAPH IN OFFICE OF THE JAHNCKE NAVIGATION CO. DURING TROPICAL HURRICANE, SEPT. 29.

RETAILERS FORM CREDIT ASSOCIATION.

Three of the leading builders' supply houses in Newport News, Va., have formed a credit association and representatives of each of the concerns will confer in monthly meetings on subjects relative to their mutual welfare.

One of the first steps taken by the association is an agreement to allow but seven and one-half cents each for sacks returned to the warehouse for credit. On sacks shipped direct to the factory at the expense of purchaser the usual 10 cents allowance on net returns will be continued.

"Safety first" has been adopted as the motto of the association. With this thought in mind a strenuous effort will be made to keep members mutually informed of changes in rating. They believe that this is a step in the right direction and that the dealers in the city will eventually see that their interests lie in cooperation with each other and affiliation with the N. B. S. A.

Firms forming the new credit association are the Acme Supply Co., Inc.; Benson-Phillips Co., and M. W. Gayle.

NEWPORT NEWS HAS NEW FIRM.

The J. B. Johnson Co., Inc., is the name of a firm just organized at Newport News, Va., for the

urer of the company. He recently resigned his connections with the Acme company and disposed of his holdings in order to organize a company of his own.

Mr. Warren is engaged in the real estate business at Newport News and is said to be a shrewd business man. Though not actively engaged in the affairs of the company, he will keep in close touch with the concern.

Mr. Bartlette is cashier of the Colonial State Bank of Newport News. Mr. Johnson speaks of him as one of the "brightest young business men" of the community and considers himself fortunate in securing him as an associate.

In addition to the offices mentioned above, Mr. Johnson is manager of the firm. He is 27 years of age and previous to entering the building material field was a government employee in the Newport News postoffice.

Sue Chicago Firms on Sherman Act.

Suit for the recovery of threefold damages under the Sherman law to the amount of \$248,818 was filed in the United States district court, Oct. 19, with the James Black Masonry and Contracting Co., of St. Louis, as the plaintiff.

Seven Chicago fireproofing building material and contracting companies are made defendants. They are the National Fireproofing Co., Illinois Terra Cotta and Lumber Co., Northwestern Terra Cotta Co., the A. B. Fireproofing Co., Whitacre Fireproofing Co., Whitacre Fireproofing Construction Co. and Nicholson Bros.

Conspiracy Charged.

Conspiracy and combination in restraint of trade are charged in the bill. It is charged the defendant companies conspired with the Bricklayers' Union No. 21 and the Plasterers' International Union to monopolize fireproofing building materials and boost prices.

The suit is similar in its legal aspect to the Danbury hatters' case, in which Loewe & Co., hat manufacturers, obtained threefold damages against the hatters' union for damages sustained as the result of a boycott.

The bill sets up that the plaintiff obtained on Sept. 9, 1911, a contract for the erection of the new Chicago Telephone company building at 212 West Washington street. It is charged further that the several defendant companies organized under the name of the Illinois Fireproofing Manufacturers' Contractors' Association and by a conspiracy entered into an agreement with the bricklayers' union and the plasterers' union to employ only union labor and to monopolize the supply of materials.

Had to Pay More.

The bill quotes the agreement with the unions, giving union working rules and scale of wages, which was to be 72½ cents an hour. As a result of the alleged conspiracy, the bill states, the plaintiff was unable to obtain building materials necessary for the telephone building, except at an enhanced price.

Building Material

Day and Night Service

No Advance In Prices

JAHNCKE
— MAIN 455 —

ADVERTISING "NO PRICE ADVANCE" IN NEW ORLEANS.

purpose of dealing in building materials in that section. The firm has a capital stock of \$15,000, and its officers are J. W. Warren, president; Frank B. Bartlette, secretary, and J. B. Johnson, vice-president and treasurer. The officers, all of whom are residents of Newport News, constitute the board of directors.

Mr. Johnson, who is the principal stockholder and will manage the affairs of the company, is well and favorably known to the trade, having for over seven years been connected with the Acme Supply Co., Inc., of Newport News. He entered the employ of that company as a stenographer and bookkeeper. His quick grasp of the building material business, his ability to make friends, sell goods and to collect slow accounts rapidly secured promotion, until he finally became manager and treas-

N. B. S. A.

What Does N. B. S. A. Membership Include?

"What are we getting for our Ten Dollars—Nothing but a membership certificate?"

The above query was received in the office of the N. B. S. A. a few days ago, and Secretary Desmond made reply to the inquiring member as follows:

"I am in receipt of your letter of Oct. 25 and was very pleased to hear from you.

"I do not really know just what you might have in mind that you would think an association such as ours could do. However, I will give you my opinion and will ask you to advise me what you think of it.

"A careful survey of the dealers' situation, irrespective of wherever you may go, finds practically the same conditions. The dealer seems to be in competition with the direct selling policy of the manufacturer, more or less, every time a job that takes more than a wagon load of material comes up. Furthermore, because of the lack of local cooperation and the knowledge that each dealer should possess of the other fellow, we find that credit conditions, prices, etc., are very much below normal.

"To my knowledge there are associations of building material dealers in practically every section of the country you may visit, and you will find them all trying to solve the question without much apparent success. Our association has endeavored during the past 17 years to do so, and I must confess that it does not seem to have been entirely successful, and the reason, I believe, is this:

"Conditions in your city in a great many respects are entirely different from the conditions existing elsewhere. In other words, there are always local elements that enter into every case and any association which overlooks the treatment of this local element is bound to be more or less unsuccessful. The mere fact that it has been difficult for our association to secure new members at all times, is sufficient indication that there must have been something wrong with its methods.

"During the past three or four months we have studied this question very thoroughly and have built up a plan which in a great measure resembles your own, and it is as follows:

"We have chosen the state of Indiana for the seat of our first operations. We have gone into that state and divided it in sections. We have established what we call 'District Committees of the Indiana Division,' of the National Builders' Supply Association. These committees are designated in numerical order, and in accordance with the rules and regulations governing, they must meet at least once each month. We have thus far established eight districts, and secured the addition of about 90 new members for our association within less than 60 days. The committees that we have established are meeting regularly each month and just as regularly do they invite all the eligible dealers who may still remain without to attend these meetings. The consequence is that new members are being received at each meeting. We arrange at all times to have, if possible, representatives of the manufacturers present to address them on subjects of most interest.

"The point I wish to make, however, is this: I know that these committees would not last long enough for me to get out of town unless there was some underlying basic principle that would serve to weld them together, and this result is achieved by the installation of a credit bureau in each district.

"By means of this credit bureau, the dealers in every district are kept conversant with the conditions prevailing therein, and when any association of business men arrives at the point where it has begun to understand and operate business along good sound credit regulations, it has solved the problem of the members' success.

"At the end of six months' time, I will not have to go to these dealers and tell them what the association has done or is trying to do for them, because they will know from a careful perusal of their books the benefits that have accrued in dollars and cents.

"When we have finally succeeded in perfecting as strong an organization as possible in that particular state, we will proceed to put it into effect in other states just as fast as we can, but we should endeavor and will succeed in finishing our first efforts perfectly, and then proceed elsewhere. When you have completed an organization that is founded on a good substantial basis—**THAT SERVES TO CONTROL ITS OWN MEMBERS**—then you have an association that can to a very great extent introduce and put into effect policies that are now lacking."

There isn't any doubt that the same thought which prompted the query to which the above is a reply, has oftentimes been in the minds of a good many other members, and if these members will come to the convention in Cleveland, they will assist in a very large measure, to hasten the result which everyone desires.

Preparing for Seventeenth Convention.

Arrangements are now under way and well along towards completion for the seventeenth annual convention of the National Builders' Supply Association, which will be held at the Hotel Statler, Cleveland, Ohio, Feb. 17-19, 1916.

During the past year splendid work has been done in the acquisition of new members; in fact, during the past three months approximately 100 dealers have added their names to the roster. The injection of this new blood into the association, coupled with the fact that these new members have been brought into the organization by means of a "local district committee" plan, which has been perfected and is now in operation, and the extension of which will form one of the chief topics for the consideration of the convention, bids fair to make the seventeenth annual meeting one of the most successful that the association has ever experienced.

Every member of the N. B. S. A. should prepare his plans now so that nothing will interfere with his attendance at the Cleveland meeting. Furthermore, the meeting will not be complete unless the members assume the responsibility of inducing their fellow dealers, who perhaps are not members, to come along with them.

The convention will be held during the period when the complete building show, the first exhibition of its kind, will be in full sway at the Coliseum in Cleveland. This show will serve to amplify the benefits that will result to every one in attendance.

Remember that this is a progressive age, and the

merchant who is progressive is the one who is successful. Our progress is assisted or retarded in just so far as we cooperate with one another to improve our conditions, and the program of activity now being prepared for the annual meeting is one that will serve to bring very forcibly to the attention of all the association's motto:

MORE PROMOTION—LESS COMMOTION.

NEW MEMBERS.

The following applications for membership have been received since the last issue:

St. Paul Builders' Material Co., St. Paul, Minn.

Midway Lime & Cement Co., St. Paul, Minn.

P. G. Speakes Co., Minneapolis, Minn.

Mill City Lime & Cement Co., Minneapolis, Minn.

Landers-Morrison-Christenson Co., Minneapolis, Minn.

Standard Salt & Cement Co., Duluth, Minn.

Speakes Lime & Cement Co., Superior, Wis.

Des Moines Building Material Co., Des Moines, Iowa.

Frank Lumber Co., Mishawaka, Ind.

Huntertown Grain Co., Huntertown, Ind.

Cline Bros. Lumber Co., Kendallville, Ind.

John Deibele, Est., Kendallville, Ind.

Eagles & Son, Albion, Ind.

Milo J. Thomas, Corunna, Ind.

The utility of a "Ford" was further displayed in securing the applications of the five last named firms. Three of the dealers in Ft. Wayne—Messrs. Moellering, Baltes and Ellenwood—went forth in Ed. Moellering's car last week and inside of a few hours had returned with them. What is best of all is the fact that they have promised to go out every week until they have them all.

This same spirit displayed by all of the members would be the greatest help that could be rendered, and it is pleasing to note that "it seems to be in the air."

INDIANA DISTRICT MEETINGS.

Well attended meetings were the rule throughout the Indiana district last month, and every gathering sees just a few more seated around the table.

Plans are now perfected which will permit of more extended work being done in these districts in the coming two months, and by convention time there will be a full-sized delegation to represent them.

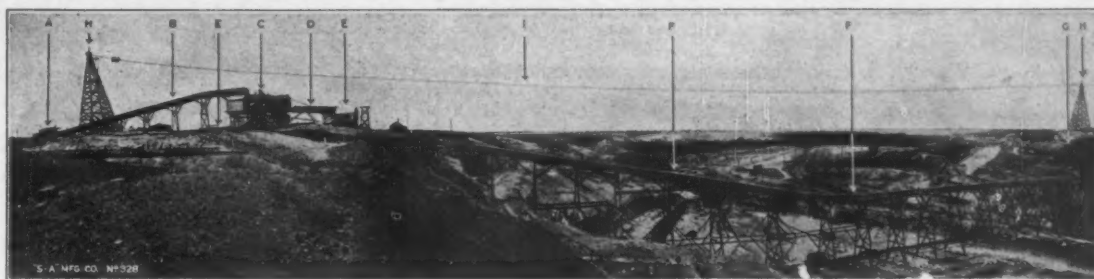
TO MEET AT KANSAS CITY AND OMAHA.

Either the latter part of November or the first week in December, meetings will be held by the dealers in the Omaha and Kansas City districts. Arrangements have not been completed as yet, but they are being taken care of by Secretary Desmond, who advises that President J. H. Allen will be on hand at both meetings, as well as representatives from Minneapolis, St. Paul and other cities in that territory.

PHILADELPHIA TRADE BECOMING QUIET.

Charles Warner, president of the Charles Warner Co., manufacturers and distributors of builders' supplies, with a branch office in Philadelphia, reports that general trade with the retailers in the Philadelphia district has been quite good, but is now beginning to slacken up a bit.

The Longest Single Belt Conveyor in Successful Operation



THIS conveyor system consists of two separate units, one for handling and mixing the concrete materials, and one for mixing the silt and gravel "fill" and delivering it to a central distributing station on the dam site.

Concrete Plant—(A) 30-foot gravel track hooper. (B) 18-inch by 400-foot belt conveyor. (C) Screening plant and storage bins. In this plant, measuring spouts deliver certain proportions of sand and stone to (D) 18-inch by 150 foot belt conveyor. In passing under the cement storage bin, this conveyor also receives the necessary proportion of cement distributed over its load of sand and gravel. (E) Batch Mixer receives from the conveyor hopper. (F) 1000-foot cableway for handling concrete. (H) Movable towers.

Mixing and Distributing System for "Fill"—The fill consists of a mixture of silt and gravel wetted and rolled down. These are dumped into separate and adjacent track hoppers 110 feet long. The mixture is effected on a 36-inch by 110-foot belt conveyor receiving from a series of reciprocating feeders under each bin. This conveyor delivers to (F) 30-inch by 925-foot belt conveyor (the longest single belt conveyor in successful operation). (G) Wagon loading hoppers. This complete system was designed and all conveyors, screens, and feeders were manufactured by us.

The success of these unusual systems is in effect the broadest guarantee that can be offered of the satisfactory solution of any conveying problem by "S-A" methods. For it is the experience gained in the installation of literally thousands of conveying systems and the reliability of "S-A" Equipment that spells success on the big and unusual jobs.

STEPHENS-ADAMSON MFG. CO.

Conveying, Screening, Transmission Machinery
Aurora, Illinois

NEW YORK
LOS ANGELES

CHICAGO
BOSTON

SALT LAKE CITY
ST. LOUIS

HUNTINGTON, W. VA.
DETROIT

PITTSBURGH
TORONTO

We design and manufacture conveying machinery for rock crushing plants, gravel washing plants, storage systems, etc. Also transmission and screening equipment, elevators, gates, feeders, car pullers.

The market place of the building material industry. Employment department, machinery wanted and for sale, etc. If your wants are not answered in this page, write a letter to this office.

THE FRANCIS PUBLISHING CO.
537 S. Dearborn Street Chicago, Illinois

:: THE :: BOURSE

Advertisements will be inserted in this section at the following rates:

For one insertion.....35 cents a line
For two insertions.....45 cents a line
For three insertions.....60 cents a line

Eight words of ordinary length make one line. Heading counts as two lines. No display except the headings can be admitted.

Remittances should accompany the order. No extra charges for copy of paper containing the advertisement.

EMPLOYEES WANTED

WANTED—A first-class hydrating man—one who understands the business thoroughly. Address Box 1081, care ROCK PRODUCTS AND BUILDING MATERIALS.

EMPLOYMENT WANTED

WANTED—Position as Superintendent or builder of lime and stone plant. High references. Address "Efficiency Expert," care ROCK PRODUCTS & BUILDING MATERIALS.

PLANTS FOR SALE

FOR SALE.

Paper Mill. Ideal location. Perfect running order. Electric equipment. Must sell. No reasonable offer refused. Address Box 1071, care ROCK PRODUCTS AND BUILDING MATERIALS.

Second largest lime plant south of the Ohio River for sale, and makes the highest grade lime. Established trade. Address E. W. R., care ROCK PRODUCTS AND BUILDING MATERIALS.

MACHINERY WANTED

WANTED—No. 4, 5 or 6 Gyratory Crusher. State all particulars and best cash price, f. o. b. cars. Address Box 1082, care ROCK PRODUCTS AND BUILDING MATERIALS.

BUSINESS OPPORTUNITIES

WANTED.

To interest parties desiring to invest in a superb 90-acre limestone property equipped with limekilns and large crushing plant now in operation, with view of adding capacity. Best location in Ohio. Address care Box 10, ROCK PRODUCTS & BUILDING MATERIALS.

A CONCERN manufacturing a high grade glass sand, with contracts for twice the amount of capacity, will exchange stock or bonds for a large crusher and elevator. Nothing less than 20 by 30 will do. Address Box 1080, care ROCK PRODUCTS & BUILDING MATERIALS.

WANTED—Sand, Gravel or Stone business in exchange for improved farm. Address Box 1075, care ROCK PRODUCTS AND BUILDING MATERIALS.

"RAILS"

All sections of new and relay rails in first-class condition. Splice Bars, Frogs, Switches and Spikes also carried in stock. We purchase abandoned plants and cheerfully quote prices on any material that you may have to dispose of.

M. K. FRANK, Frick Bldg., Pittsburgh, Pa.

RAILS

all sizes—small or large lots. New and relaying. We are familiar with quarry requirements and know just what you need. Frogs, switches, splices and all track accessories. Immediate shipment from stock.

L. B. FOSTER CO.

PARK BUILDING

PITTSBURGH, PA.

Paper Bags
of
Quality.

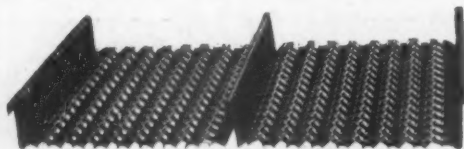
For All Purposes

The Jaito Company

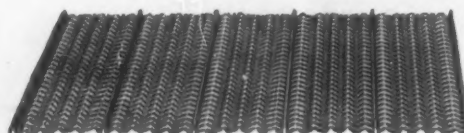
Easton, Ohio

Strongest, Most Flexible

Tell 'em you saw it in ROCK PRODUCTS AND BUILDING MATERIALS



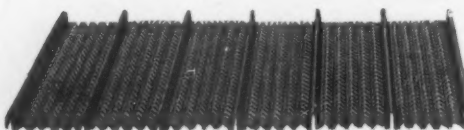
1 1/2" Hy-Rib—Very rigid. For heavy loads and wide spans



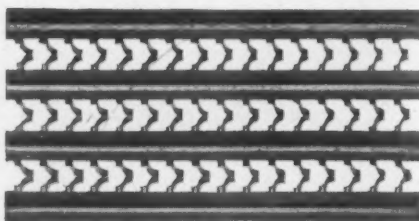
3/4" Hy-Rib Lath used as a self-furring lath and in partitions, ceilings, etc., for stud spacings 24 to 36 inches



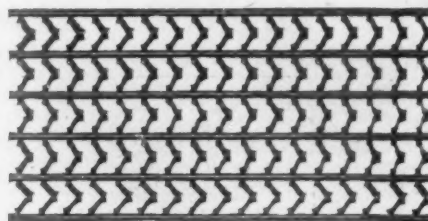
12/16" Hy-Rib—Widely used in partitions, sidings and ceilings



15/16" Hy-Rib for floors and roofs without forms—sidings, partitions, and ceilings without channels



Beaded Plate Rib Lath—Permits two-coat work instead of three



Standard Rib Lath in 3 gauges. Also "B" Rib Lath, similar in design

The Complete Line of Best Products

Hy-Rib, Rib Lath, Diamond Lath, Pressed Steel Studs, Corner Beads, Base Screeds, Etc.

Your needs are filled completely and exactly to the smallest detail by our large line of products. You avoid makeshifts, delays, expense and bother by securing all your materials from one source.

Hy-Rib is furnished in four depths from 3/8" to 1 1/2" Hy-Rib, each in various gauges. Hy-Rib is a complete unit of reinforcement forms, lath and channels for roofs, floors, walls, partitions, ceilings, etc.

Rib Lath, the best and most economical lath, is furnished in three distinct types and various gauges, also is Diamond Lath in two types and many gauges.

Kahn Pressed Steel Studs include channels from 3/4" to 2" in size, studs with prongs from 2" to 12", and hollow studs in various sizes.

Our Steel Corner Beads, for the protection of plastered corners, are furnished in four types. Metal Base Screeds for use between cement base and plaster are supplied in three types.

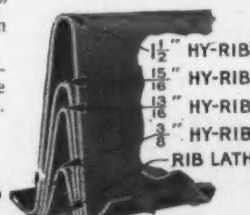
Write for Catalogs, Suggestions and Quotations

Trussed Concrete Steel Co.

Dept. H-26

Youngstown, Ohio

Representatives in Principal Cities



IT'S THE STRENGTH OF THE RIBS THAT COUNTS

THE BELDEN BRICK CO.

Sales Offices:

Incorporated 1893

CANTON, OHIO



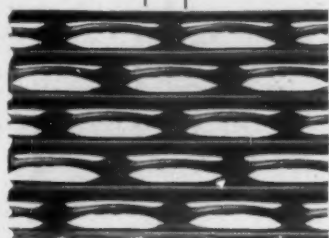
FIVE MODERN FACTORIES

producing practically every color and texture of Face Brick put us in position to take care of the dealer to the best possible advantage. It will pay you to have our samples and prices. Write now.

FACTORIES:

Canton, O. Somerset, O. Port Washington, O. Uhrichsville, O. Tuscarawas, O.

Tell 'em you saw it in ROCK PRODUCTS AND BUILDING MATERIALS



Do It Now!!

On Account of the Advance in Sheet Metal Metal Lath Prices Are Up

The End Is Not Yet

The buyer of Metal Lath, Corner Bead, Ground Bead, Wall Plugs and Wall Ties, will make money by purchasing now.

Telegraph at Our Expense Your Requirements

The Bostwick Steel Lath Co., Niles, Ohio

BRICK—The Old Way of Handling Them is a Nuisance

In tossing brick out of a car many are broken. A wheelbarrow doesn't carry enough bricks to warrant the time it takes to load, wheel it out and dump it.



Use a CLEVELAND BRICK CLAMP

It is the Newest and Quickest Way

Furthermore, in unloading brick it actually saves ONE-THIRD of the time over the old methods. This clamp is adjustable and will carry from FOUR to TWELVE bricks. There's no fuss or bother. Simply place the clamp down on the bricks and lift the handle.

The price? It is so inexpensive ANYONE can afford it. Just send your name on a postal and we'll send a neat catalog and price list.

THE P. D. CRANE COMPANY, 10201 Harvard Avenue, Cleveland, Ohio

LINK-BELT CRANES



used by the U. S. Navy Dep't, Philadelphia
Designed and built for hard, continuous service. Equipped with Grab Bucket, Electric Magnet or Pile Driver. We invite investigation. Write for catalog.

Link-Belt Company

Philadelphia Chicago New York

The first Portland cement manufactured in America

1866

1915



COPLAY CEMENT MANUFACTURING CO.

Mill, Coplay, Lehigh Valley, Penna.
PHILADELPHIA NEW YORK BOSTON JACKSONVILLE, FLA.

"Concrete for Permanence"

Robert W. Hunt

Jno. J. Cone

Jas. C. Hallsted

D. W. McNaugher

Robert W. Hunt & Co., Engineers

Bureau Of

INSPECTION TESTS AND CONSULTATION

General Offices

TESTS OF PAVING BRICK

2200 Insurance Exchange, Chicago

SEND FOR OUR BOOKLET "B"

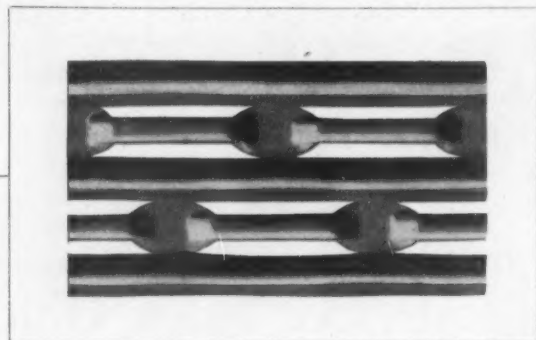
THE METROPOLITAN PAVING BRICK COMPANY

Manufacturers of "BEST PAVING BLOCK MADE"

CANTON

OHIO

Tell 'em you saw it in ROCK PRODUCTS AND BUILDING MATERIALS



Sykes Trough Sheet Lath

Strongest Sheet Lath Made

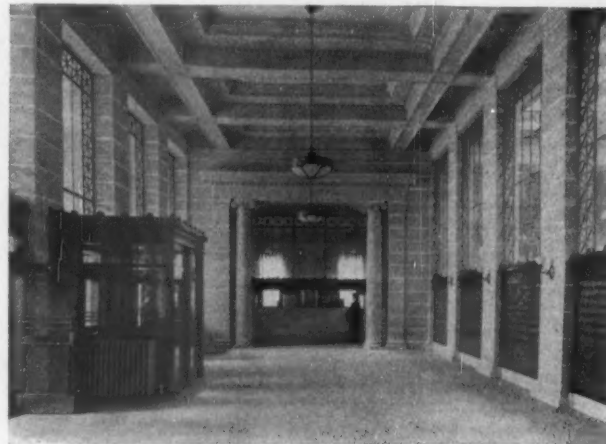
The exclusive design of this lath makes it particularly adaptable for ceilings, mantel and tile setting. An ideal lath for interior plastering. Being a sheet lath, it is as easy to plaster on as wood lath and very economical in amount of mortar used. Furnished in anti-rust (oil) coating or painted black. Write for free sample and prices.

**For
Expanded Metal Lath
Use
Sykes' Expanded Cup
Self-Furring**

—the strong metal lath that saves
3 cents to 5 cents a square yard.

Write for free book of Specifications for Stucco or Metal Lath and free sample of Sykes Expanded Cup Metal Lath.

SYKES
Metal Lath & Roofing Co.
508 River Road Warren, Ohio



Main Lobby, United States Post Office Bldg., Piqua, Ohio
Finished in Excelsior Caen Stone Cement
Supervising Architect, U. S. A. John G. Unkefer, General Contractor

Excelsior Caen Stone Cement
serves Uncle Sam well, and will serve your customers too.
Get in line with this winner—it means Big Profits and Repeat Orders for you.



Write us
today for booklet and samples
"Catalogue in Sweets"

**The Cleveland Builders'
Supply Co.**
MANUFACTURERS
Leader-News Bldg. Cleveland, Ohio

**IF you knew
positively that**
you could free yourself
from further bag trouble, and
all delays and waste of money,
you certainly would take steps
toward that end. The Bates
System Valve Bagger with valve
paper bags for sacking Cement, Lime,
Plaster, Alca, Ground Stone, etc., will do
the work you want automatically and
accurately fill and weigh every sack.
150 tons per day of lime—one machine.

Write for Particulars.

The Urschel-Bates Valve Bag Co.
TOLEDO, OHIO
BRANCH FACTORY: NIAGARA FALLS, ONT., CAN.

NEWS of the TRADE

New England Closing Big Year.

Boston, Mass., Nov. 4.—Boston and New England is finishing up the biggest building year of its history and going into the next to the last lap of the round with current conditions in very satisfactory shape. Building permits of the last fortnight, as reported by the F. W. Dodge Co., show the amount of valuation \$2,232,000 on 272 projects. Firms and dealers went at the situation hard and early when the Spring months banked up one discouragement after another on the trade horizon and in the last analysis is seen the benefits of grit and hustle in the gloomy days before the inevitable favorable turn came.

The fall trade has been all that could be desired, large jobbers say. This has been assisted by especially favorable autumn weather which correspondents from interior points assert will mean marked activity as long as freezing weather is deferred and a situation far above the average the whole winter through. With all its reputed conservatism, the New England section proved to the country again that it knows when to take advantage of a bargain season and through the whole six states, it absorbed drayloads, carloads and trainloads of lumber and brick, steel, tile and cement and other materials, and put it where it will do heaps of good by the time several brother and sister nations across the Atlantic get through messing one another all over Europe and Asia.

The labor situation holds fair shape. The organized branches have all seasonal agreements in hand and contractors keep by them for rough work unskilled workmen following from job to job with much better success than obtains in the big mills further South which turn out the cement going so heavily into record-breaking building construction hereabouts. This, despite the withdrawal recently of several shiploads of reservists directly from this section, one liner for Italy taking 500 men last Sunday, and a previous sailing taking 1,500. Locally a strike of the 2,000 freight handlers of three railroads, the New Haven, Boston & Albany and Boston & Maine is giving no concern on the score of loading and unloading, as only less than carload freight is affected. The railroads are satisfied with non-union men installed and keeping clear, but uneasiness prevails among the teamsters and street hauls are in likelihood of being complicated unless conciliation proceeds faster to a successful conclusion.

Locally cement is now quoted at \$1.77 a barrel to the dealer; \$1.82 to consumer. The price advanced 10 cents on Nov. 1, this being 40 cents above last Spring's low level.

Dredging has been started on the big government drydock, mentioned as just put under way in the last issue of ROCK PRODUCTS AND BUILDING MATERIALS. This \$3,500,000 operation involves 200,000 barrels of Lehigh Portland cement, the contract for which, completed last week and signed, is the sizable one of the year here in that line.

Coupled with reports of good business, trade opinions continue optimistic.

James C. Lincoln, of Waldo Bros., Inc., said: "Taken all around, conditions in the trade are normal for the time. There has been an abundance of good weather lately and this has been an effective factor, especially, in the rural districts. Unusual strength is seen there in the past few weeks and it is not too hopeful to look for more developments

from that quarter. The city field is active, as usual, and steady."

John W. Ramsay & Co., said the last half of the year promised to more than make up for the slackness of the first half.

Thomas E. Santee, of Alpha Co., said: "We are finishing up the biggest year of business ever in this territory, Boston and all New England."

Chicago Retailers Still Active.

The splendid weather which is favoring Chicago has resulted in keeping manufacturers and retailers of building materials quite active. Every day permits are being issued for large and small apartment houses, flats, residences and business structures.

Face brick dealers are exceptionally busy, having

Milwaukee Improvements Continue.

Milwaukee, Wis., Nov. 4.—While building operations in Milwaukee during October did not reach the high record attained during the month of September, when the total building investment showed a gain of 145 per cent, there was a satisfactory gain. There were 361 permits issued for structures to cost \$747,169, as compared with 281 permits and an investment of \$668,413 during the corresponding period a year ago. Building expenditures in Milwaukee county thus far this year total between \$16,000,000 and \$17,000,000, according to Building Inspector W. D. Harper. This estimate includes more than \$10,000,000 already accounted for in the city of Milwaukee. There has been an extensive amount



Union Station. Postoffice. Chicago & Northwestern Station.
TYPE OF STRUCTURE FOR CHICAGO'S PROPOSED WEST SIDE POSTOFFICE, BETWEEN PRESENT NORTHWESTERN TERMINAL AND UNION STATION NOW UNDER CONSTRUCTION.

recorded during the month of October the sale and delivery of 13,000,000 face brick. The bulk of these orders are for large apartment buildings which are being constructed in various parts of the city.

Last week Mayor Thompson, supported by the Chicago Plan Commission and the Chicago Association of Commerce, laid Chicago's desires relative to a West Side postoffice before William G. McAdoo, secretary of the treasury. The secretary was informed of the plan for the orderly development of the city, which is based on the idea of the late Daniel H. Burnham, and which includes among other improvements a West Side Union terminal project with an array of street, viaduct and bridge improvements, all of which must be completed within the next four years. The government was asked to lend its cooperation in carrying this plan to fulfillment by the erection of a postoffice building in close proximity to the Union and Northwestern depots and to construct a building to conform to the architecture of the railway terminals while supplying practical and necessary requirements.

West Vancouver, B. C., contemplates the installation of a waterworks system. The water will be taken from Twin Creek and a reservoir, 50 feet square and 16 feet deep, with a capacity of 300,000 gallons, will be constructed.

of building carried on, not only in Milwaukee county, but all over the state this season. Jobbers and retailers in building material say that trade has been much better than anticipated earlier in the year.

Central business conditions all over Wisconsin are showing much improvement and this has naturally encouraged building operations. Here in Milwaukee the iron, steel and heavy machinery manufacturing plants, which make up the city's leading industry, are now operating better than 90 per cent of their capacity, according to W. J. Fairbairn, secretary of the Metal Trades and Founders' Association. This means that money is more plentiful, collections are easier and trade in general is more satisfactory. A bumper grain crop was harvested in Wisconsin and this is now being disposed of at good prices. The corn crop of the state, which many feared would be below standard because of the unfavorable weather conditions early in the season, matured fairly well before it was taken by the frost and the percentage of loss seems to have been light in most sections of the state. This has created a feeling of confidence and has resulted in work in many delayed building projects pushed to conclusion. The unusually fine weather which has been experienced this fall has also been a strong factor in encouraging building work.

Retailers Buying More Liberally.

New York, Nov. 4.—Building material interests throughout the East have felt a quickening pulse to trade within the last fortnight. They have been slow, but cautious buyers. They have not been able to understand with clarity just why the price of even the most basic of building materials should have been advanced and they have been inclined to interpret it as an attempt to scare them into making large reservations for the winter.

On the other hand, manufacturers have been inclined to hesitate about advancing prices. They have noted with pleasure considerable gains in prospective building construction during August, September and up to the first half of October, and they have been loath to discourage building and dealers from buying because of stiffer lists. In some cases they made concessions to old customers to encourage buying, but when buying failed to develop and labor became scarce, further cutting down and not over-abundant mill supply, they were actually forced to shift their prices upward.

An index figure worked out by a prominent economist covering the ten leading building commodities sold in the Metropolitan district showed a gain of 2.7 per cent over the index figure for the same ten commodities on this market on Oct. 15, 1912. This gain represented prices between the autumn of 1915 and the autumn of the last good building year—1912. Value of construction showed an improvement of 22.5 per cent and volume of construction 2.1 per cent, for the entire district, including the five Eastern counties in New Jersey.

Based upon this computation it would seem as though the manufacturers had just cause for putting up their prices, especially in view of the shortage of supply on hand, if not the prospect of abnormal demand before the 1916 building season gets fairly under way.

Dealers find themselves in the very uncomfortable position of extreme competition for new jobs, in which shading contributes a large part of the negotiations, small stocks in hand, extreme conservatism and a threat upon the building operator that he will not pay any such price advances as have been quoted. He finds the manufacturers' prices stiffer than usual and he is between two mill stones, as it were.

There are well-grounded economic reasons why prices should advance just now. Labor is scarce, funding is in progress in order to equip mills with machinery with which to reduce overhead when the real building rush develops next year, interest is high, machine shop capacity is hard to get, owing to war orders that have been crowded in everywhere, cost of raw materials have advanced, car shortage makes for heavier and more stringent demurrage charges and there may be call for exports for which the manufacturer wants to be prepared, notably in the cement, patent plaster and other fireproofing materials. Deferred road improvement and municipal work must come out before long and this, if it develops, will intensify demand. These are a few reasons why dealers may expect to meet higher prices during the next few months anyway.

Business Confined to Deliveries.

Cincinnati, Ohio, Nov. 4.—While the weather during the past six weeks or so has been about the best of the whole year for building, and construction on jobs under way has accordingly made much progress, the approach of the winter season has had the usual effect of discouraging the beginning of new work. For the most part new contracts made have therefore been of the smaller sort, and the activities of supply concerns have been confined to deliveries on work under way. The feeling in the trade is decidedly optimistic, however, as prospects are considered good, judging from records of the architects' offices, and with plenty of money available for building work, it is felt that the com-

ing year will see an unusual degree of activity.

The Cincinnati Brick & Supply Co., with several good-sized contracts on its hands on which brick deliveries are being made, has had plenty to see to in taking care of these, with figuring on some of the new work in sight to handle as well. Among the jobs on which brick are now being delivered are the chemistry building at the University of Cincinnati, on which 200,000 Key-James brick will be used; a school in Covington, Ky., on which 75,000 Greendale mats are being delivered; the Warsaw school, in Cincinnati, for which 200,000 Darlington brick will be required, and a number of smaller jobs.

The Pursell-Grand Co. secured one of the most important of the material contracts involved on the addition to the Pogue building recently, when it was awarded the contract for supplying all of the hollow clay partition tile which will be used in the structure, amounting to about 150,000 lineal feet.

Architects Garber & Woodward will shortly call for bids on the remainder of the buildings and other construction on the East high school, the general contract on a large part of which has already been awarded to the Ferri-Concrete Construction Co., of Cincinnati. None of the face-brick has yet been selected, however, so that this good-sized plum is still to drop.

Fine Weather Helps Pittsburgh Dealers.

Pittsburgh, Pa., Nov. 4.—Continued fine weather has made all retailers happy. Outside operations have been going ahead better than usual at this season. Most of the summer jobs are practically completed. Some few jobs of concrete work are still hanging over but with another week of good weather these will also be out of the way. Not many large contracts have been let during the past two weeks for concrete work except at the big mills, where additions are being made right along. The railroads are doing considerable repair work but are holding off letting contracts for new construction until after the first of the year. Street work is pretty well closed up. County and state road contractors have also about finished their season and are now waiting for new requisitions to come out. The past two months has brought up the total of the retailers' business in this district considerably, so that after all they will not have such a bad year as anticipated earlier in the season.

Toronto Business Improving.

Toronto, Nov. 2.—The building supply business in Toronto is looking up, said one dealer this week when asked as to the situation. He pointed out that the bank clearings, building permits, railway earnings, etc., all spelled more activity generally and in the building trade in particular. The two new stations in Toronto are helping to liven up things and there has been added activity in real estate. Chief among the recent sales is a half million transaction by which 110 acres on North Yonge street were sold by the Docereourt Land Co. to a syndicate of Ontario investors. The property faces Lawrence Park where so many expensive houses have been erected recently. It is intended to make a second Lawrence Park on the opposite side of the street.

Conditions in Western Canada.

Winnipeg, Man., Nov. 3.—According to reports published in different parts of Western Canada, business in the building, engineering and builders' supply trades is picking up extremely well. Money is beginning to move as a consequence of the big harvest which has been gathered throughout the West, and it is confidently expected that during the course of the next few weeks that collections will steadily increase.

News of the Michigan Field.

Detroit, Mich., Nov. 4.—Building has been very good the past six months, far exceeding the same period a year ago. Prices for builders' supplies are still low and for that reason business is not satisfactory.

The United Fuel & Supply Co., the largest dealer in Michigan, is running ads in the daily papers for teams and men. The company is having an unusual heavy fall business.

The Federal Clay Products Co., of Mineral City, Ohio, has opened a large display room in the Majestic building, in charge of J. Ira Davy.

W. B. Rollinson, formerly manager of the National Fireproofing Co., Detroit, Mich., and now located in Chicago, spent several days here this month. R. L. Stoddard is now in charge.

George L. Morris, for the past 12 years connected with the Wabash Portland Cement Co., resigned Oct. 1, to enter in the accounting and auditing business.

The Eastern Supply and Fuel Co., with yards located at Charlevoix & Detroit Terminal railway, was turned over to Gus. F. Smith Co., on a trustee mortgage and the assets are being disposed of for the benefit of the creditors, of whom there are a large number. This firm was organized February, 1915, with Frank L. Evarts as president and H. C. Ruekamp as manager, but was not a success.

J. A. Pfeiffer, representing the Northwestern Expanded Metal Co., of Chicago, visited Detroit last week on his way back from a trip in the South. He is of the opinion that Detroit is making more progress than any city in the country.

The Detroit Ornamental Stone Co., the largest manufacturer of cement products in Michigan, and operating a plant at Humbolt and Breckenridge on the Michigan Central railway, is now in the hands of receivers. A. R. Rutledge is disposing of the stock and will operate a plaster mixing plant on the premises.

The warehouses of the United Fuel & Supply Co., located on Hart avenue and Detroit Terminal railway and formerly occupied by the Bartlett Supply Co. before the consolidation with the United Fuel & Supply Co., were destroyed by fire. The buildings contained no stock.

The Detroit Coal & Block Co., on Hart avenue, was sold by the Bankruptcy Court last week.

The Cadillac Sand & Gravel Co., of Toledo, Ohio, large producers of sand and gravel, with plants at Fleming Creek, Mich., on the Michigan Central railway, near Ypsilanti, Mich., has opened an office in the Penobscot building, in charge of G. L. Dimmick, Jr.

Clyde B. Elwood, representing the Ohio & Western Lime Co., was in the city this week calling on Detroit dealers.

The Irwin & Leighton Co. is making rapid progress on the new Public Library building. The firm also has the general contract for the Crowley-Milner department store building, and the new Municipal building.

Enlargement of the plant of the Aetna Portland Cement Co., near Fenton, Mich., and other extensive improvements of the property, involving expenditure of many thousand dollars, are understood to have been decided on at a conference in Detroit this week between R. E. Paine and F. R. Johnson of Boston, and O. J. Lingemann of Detroit, general manager of the company. Mr. Paine is a Boston capitalist and Mr. Johnson is identified with the United Shoe Machinery Co. Both have a large interest in the Aetna Cement Co.

Sand shippers are experiencing considerable difficulty in getting cars, there being a shortage on account of the amount of coal moving.

The Hesse-Martin Iron Works of Portland, Ore., are sending out a new catalogue of their portable asphalt and tar heaters.

CONCRETE

World's Biggest Concrete Job.

Boise, Idaho, Nov. 4.—If the concrete in the Arrowrock dam, the highest in the world, and located 20 miles above this city, which was officially dedicated Oct. 4, were placed in the average block in most any city in the United States, it would stand flush with the four streets around it, as high as a 15-story edifice; if it were put into a column 10 feet square, it would stand 29 miles high. No bigger job of concrete mixing for one structure was ever attempted before in this country. Today this dam stands completed, a tribute to the reclamation service and engineering and constructing ability of F. E. Weymouth, supervising engineer of the Idaho district; Charles H. Paul, construction engineer, and James Munn, superintendent of construction.

If this masterpiece in concrete could be weighed it would tip the beam at over a million tons. Today it is wedged and anchored in arch shape with a radius of curvature at 662 feet, 1,100 feet long between sheer mountains towering a mile high. Its total height is 348.5 feet, 91 feet of which is below the Boise river bed, across which it has been constructed. It rests on a base 240 feet wide, which represents its thickness where it is concreted to granite. At the top it is 16 feet wide, crested with a concrete roadway guarded on either side by a parapet wall four feet high, crowning which are are light pedestals the entire sweep of the curve. The sides are also anchored to granite cliffs. Inside of it are spacious inspection galleries running its full length at various levels, the lowest 230 feet below normal high water surface. In these galleries is the mechanism that operates the 20 outlets controlling the impounded water. Today, two of these, four feet and four inches in diameter, control the total flow of the river. There are more steps inside the apparently solid dam than are found in most hostleries. They, too, are made of concrete.

One side of this mighty dam contains a concrete deck over which logs floating down the reservoir can be snaked across and shot into a concrete chute, through a tunnel and dropped 60 feet into the river below. There are 3,000,000,000 feet of merchantable timber valued at \$36,000,000 tributary to this reservoir, and it is estimated it will take 50 years to float and shoot it over the dam. On the opposite side is a concrete-coated spillway cut out of solid granite to take care of waters in the flood season. It has a capacity of 40,000 cubic feet per second. The crest is 400 feet long and the water, rushing over it, drops into a trench 10 to 70 feet deep and is carried a distance of 900 feet around the dam, cascading down the mountain side into the river below. For extreme flood waters the dam is so built as to allow a flow of four feet in depth to rush over it without damage to the structure.

Turning constantly, mixing and kneading their two-ton charge of concrete, double-cone mixers churned for four years to mix enough concrete to fill the excavation for the dam and raise it to its present towering height. A total of 700,000 cubic yards of rock and dirt was excavated for both dam and spillway and 600 cubic yards of concrete were dumped into the dam. Where it was possible, great boulders were used in the construction. A mountain side of gravel was moved, screened and dumped into gravel trains and carried 13 miles to the mixers. These were dumped with the regularity of a clock. Electric cars then rushed the concrete into

a tunnel to the distributing tower. Cableway buckets sailed through the air between the tower and hopper. It was then distributed from the hopper by chute to various points on the dam. In less than three minutes from the time gravel left its bin at the mixing plant, it was in its final resting place in the concrete of the dam. Every day saw the dam 2,000 cubic yards nearer completion.

A sand cement plant, with a capacity of 1,000 barrels per day of 24 hours, had a total output of 585,240 barrels. Crushed granite run through this plant and ground with Portland cement was mixed 45 per cent sand from the granite and 55 per cent Portland cement, giving a better and stronger mixture than pure cement. The mill was erected below the dam. Granite from the spillway excavation was passed to it through a chute, run through a rock crusher and sand rolls, dryer and ball mill and pulverized to pass a 20-mesh sieve. Mixed later with Portland cement it passed through a 200-mesh. Afterwards it was stored in large covered bins and as needed was blown by air pressure through a tube across the excavation to the mixers. All sand cement passed thorough test before used. The plant is now being dismantled.

Before the foundation was laid, holes were drilled 30 to 40 feet into the granite bed and grouted with pure cement under air pressure to fill all possible crevices. These holes were carried up into the dam together with seepage test holes into the inspection galleries where grouting machines can be set up and grouting resumed if water is found to seep through. If seepage develops the water will be carried off through the galleries.

The dam was started four years ago and completed over a year ahead of time at a saving under the estimates of \$2,500,000. The total cost was \$5,000,000. Behind it is impounded enough water to flood the city of Boston with eight feet of water, or 244,300 acre feet. If spread over 360

square miles it would cover that area a foot deep. The reservoir so created is 18 miles long bounded by mountains; the water is 200 feet deep. This water, together with that in the Deer Flat reservoir below, will irrigate 240,000 acres of land in the Boise project, located in western Idaho, tributary to Boise. When used for irrigation purposes the water is allowed to pass from the outlets in the dam back into the river below which carries it 15 miles down stream, where a diversion dam diverts it into the New York canal, a cement lined artificial river, which in turn takes it on 35 miles to the valley below for storage in Deer Flat reservoir, from which it is passed through the distributing canal system to the lands.

CONCRETE EXTENSION BUREAU'S PLANS.

The Concrete Extension Bureau, with offices at 910 Southwestern Life building, Dallas, Texas, has been organized and is being supported by cement manufacturers doing business in the states of Louisiana, Texas, New Mexico and Arizona, and is not, as previously reported, a part of the Chamber of Commerce or the Manufacturers' Association of Dallas.

L. S. Bruner, engineer in charge of the bureau, states that an endeavor is being made to cover the four states mentioned by promotion and advertising. The promotion work will be directed principally along lines of road work and concrete on the farm, although wherever possible other lines of work will also be promoted. He states that the bureau might be considered a local association of cement manufacturers with the same object in view as the Association of American Portland Cement Manufacturers, namely, the promotion of the use of cement. The bureau is keeping a complete technical file and conducting a bureau of information.

The Pittsburgh Engineering Construction Co. regards prospects as unusually good for concrete work next year. The difficulties are that material and labor are both very high. The company is finishing up its big contract for bridges, etc., on the Montour railroad at Pittsburgh.



COMPARISON BETWEEN-
ARROWROCK DAM, BOISE, IDAHO, 348.5 FT. HIGH
FLATIRON BUILDING, NEW YORK, N.Y., 286 FT. HIGH
DRAWN TO SCALE.

RECENTLY COMPLETED ARROWROCK DAM, NEAR BOISE, IDAHO.

"Bauernhof" on Estate of August A. Busch

It is rare in the practice of an architect that the completed result of a project which was conceived in an impulse of enthusiasm conforms so closely to the original sketch, as was the case with the group of service buildings on the private estate of August A. Busch, president of The Anheuser-Busch Brewing Association. A description of them would be incomplete without some reference to their conception and the manner in which the owner's brief instructions were given.

While in the office of the architects, Klipstein & Rathmann, of St. Louis, Mr. Busch, discussing other work, noticed some foreign photographs with-



"BAUERNHOF" ON ESTATE OF AUGUST BUSCH, NEAR ST. LOUIS, MO.

in his reach, and began looking at them without forgetting the business on hand. Suddenly, with characteristic enthusiasm, he held up a copy of one of the picturesque portals of the City of Rothenburg, exclaiming, "Here is something I like. I want you to build a Bauernhof for me, with a main entrance in this style." He explained that a Bauernhof was a group of farm buildings around an enclosure, very often seen in Germany, and that he wished to have all the service buildings for his estate built in this manner, providing for the housing of about 18 cows and 20 horses.

A model dairy, a large coach-house, spacious garage and dwellings for at least five families and room for unmarried chauffeurs were also required. He further expressed the wish of being able to see his horses as soon as he entered the archway, which was achieved by the long line of doors in the stable facing the court.

With these instructions, the architects proceeded to study out a plan, borrowing freely from the quaint half-timber work of Nuremberg and Rothenburg and forwarded their first solution of the problem in the form of a main floor plan and a hastily prepared perspective to the owner at his summer home. Much to their delight and somewhat to their surprise, the sketches were returned approved, the owner commenting that the perspective was a perfect portrayal of the picture he had in mind when giving his description of a real German Bauernhof.

The estate consists of about 200 acres of richly wooded land in the most picturesque section of St. Louis county, about 12 miles from the city of St. Louis, on the Gravois road. This once formed the southern half of U. S. Grant's farm, from which he enlisted as lieutenant in the Fourth Missouri at Jefferson Barracks, only a few miles distant in the direction of the Mississippi river. "Hard-scrabble," the old log cabin wherein the young lieutenant and his bride began housekeeping, still stands on the premises as a memorial.

The buildings where no connection is essential, are divided by a solid brick wall for fire protection. The walls are of brick, 13 inches and 18 inches thick, with Medusa white Portland cement

rough-cast on the outside. These buildings include dwellings, club house, stables, garage and chauffeurs' lodge.

Every detail is followed out by the architects, even to having the troughs in the stables provided with a unique water supply device by which each horse is automatically supplied with fresh water every half hour.

PLAN TO EXTEND GALVESTON SEAWALL.

Galveston, Texas, Nov. 4.—As an additional protection to the city and island of Galveston in case of repetition of the terrific tropical hurricane and accompanying high sea that visited here recently it is planned to extend the seawall a further distance of 10,300 feet. The Federal Government will be asked, through congress, to make an appropriation for bearing the cost of part of the proposed improvement and the remainder will be borne by the county. The structure will be constructed of reinforced concrete on the same

lines as the part already built and which served to such good purpose during the recent trying ordeal through which the city passed.

HIGH FLOODS PROVE TEXAS DAM.

The new \$1,730,000 dam, which was recently finished across the Colorado River, at Austin, Texas, was put to the supreme test by an almost unpre-



FLOOD PASSING THROUGH AUSTIN, TEXAS, DAM.

cedented high flood in that stream recently. The dam is of reinforced concrete construction.

The water rose to a height of 68 feet within a few hours. Several of the 28 sluice gates were torn from their fastenings and washed away, but beyond this no damage to the structure was done. The gates can be replaced at little cost. The test which the dam endured demonstrated the necessity for the construction of a boom several miles up the artificial lake to catch the drift that comes down with each rise. Many acres of logs and other debris were collected back of the dam during

ARMOUR PLANT AT LA PLATA.

A Buenos Aires magazine calls the new Armour packing plant at La Plata, Argentina, "dreadnaught of packing houses." It is believed to be the largest, finest and most perfectly appointed house of its kind ever built, and, while it is expected to give an impetus to beef raising, it is also expected to practically create swine raising on a large scale in South America. It promises of itself to be an important influence in the promotion of international trade.

The plant consists of 17 reinforced concrete structures covering 24 acres of ground and costing about \$3,500,000. It will employ about 3,000 men and women, and can handle 1,500 cattle, 2,500 sheep and 1,000 hogs. The plant is such a conspicuous mark in the landscape that it is called the new landmark of Buenos Aires.

New Ventures and Incorporations.

The Penn's Grove Construction Co. has built in South Penn's Grove, Pa., a plant for the manufacture of concrete blocks and bricks. At present hand presses are used, but shortly there will be installed at a cost of \$5,000 a machine which will manufacture 120,000 bricks daily.

Knoxville Concrete Co., Knoxville, Tenn.; capital, \$5,000; incorporators, W. S. Roberts, W. H. Shaver, E. M. Wilkerson and others.

The Truswall Stone Manufacturing Co. has leased a large tract of land in East Peoria, Ill., and is building a new factory at that point. The work of construction is under way and the plant expects to move within the near future. The new site affords better shipping facilities by electric, steam and water traffic and this is given as the reason for the move, together with the necessity of a larger plant.

Perpetual Concrete Products Co., Chicago, Ill.; capital, \$10,000; to manufacture and deal in cement and cement products; incorporators, Abram Z. Zietlein, Robert Edelson and Jacob Horwitz.

Shiplett Concrete Co., Huntington, W. Va.; capital, \$20,000; incorporators, C. N. Davis, D. W. Brown, J. L. Caldwell, Jr., and others.

Calumet Cast Stone Co., East Chicago, Ind.; capital, \$10,000; to manufacture and sell concrete products; directors, W. C. Barrett, H. E. Shephard, W. F. Anderson, Albert G. Getty, W. Alstrom, A. H. Wiltfong, William Moore.

The Niles Canyon Stone Products Co. has been incorporated at San Francisco.

The incorporation of the Corinne Concrete Tile Co. is reported from Corinne, Utah.

CEMENT

Scientific Business

The problem of manufacturers generally is how to balance production with consumption, in order that profit may accrue from the operations of the plant. Evidently, in the manufacture of cement, there have not been enough trial balances to determine the real conditions of the individual institution or the industry as a whole. For years manufacturers have gone along without paying dividends, or, if they did so, went to the bank and borrowed the money to pay them and postponed the reckoning until a later day. Fortunately for the industry a closer diagnosis of their individual businesses has become a part of the account of the cement manufacturer and the result is that a new era has come on the scenes and quantity is not the watchword of the manufacturer nowadays; it is practical handling of the operations so that a profit will accrue from the investment of \$2,000,000 to \$14,000,000, in one company, in order to make money out of cement.

The same fault that has caused many other manufacturers to suffer has afflicted the cement manufacturer. He figured that he could make cement at 50 cents or 60 cents; in fact, many organizations were affected in early days of cement, for promoters claimed it could be made for 40 to 45 cents. The fact is that if you will take the books of the various cement manufacturers for the past three years and take all the capital invested in their operations, you will work out a cost system that will show you how much it costs to put cement in the bin—that is, material and labor cost. Then when you add sales cost, overhead charges and contingent expense you will see the balance figuring the cost of manufacturing cement about 75 cents at the mill.

Suppose operators had been able to get \$1.10 at the mill for a period of three years, how much money would they really have made on this production at 75 cents? It certainly would not have been over 6 per cent on the investment of capital, but unfortunately for the industry the cost has been at the maximum because in this year, 1915, and in the year 1913 no one institution ran its plants to capacity. In fact, it is seldom any one manufacturing institution is run full the year round; and, therefore, any time the production is not maximum, the overhead charges abnormal and you have to add to what seems like a reasonable overhead expense, the price will be bobbing up to 80 cents.

Suppose the capitalization is \$300,000,000 and you were to make six per cent on it. Eighteen million dollars would be necessary to pay this small dividend. Unfortunately, during two-thirds of this last three-year period the price would not average 95 cents at the mill. If you take off your bag cost you will see the margin between actual cost and actual sale price is very much less than six per cent. Now, when an industry with the most economical raw material, with the most scientific producing ability and the finest plants in the world cannot make six per cent on the money invested in business, you know there is something the matter with the management. You know there is need for operating management, better selling management and, what is more essential to the success of the whole business game, whether in cement, lumber or making pies, coöperation, intelligent discussion

of the main points at issue in the manufacture and sale of the product and a free and honest effort of the men in the industry to help each other in order that they might help themselves.

It is pleasing to note that the Association of American Portland Cement Manufacturers is more intelligently handled today than ever in its history. There is a feeling in the ranks of the association that it must be conducted according to the best possible business methods. The individuals must take their responsibility and do their part towards conducting this business on a better basis.

If between now and Jan. 1 everybody refrains from filling up the stock houses and spends more time in trying to figure out how the cement manufacturers of America can best help themselves by working with the association daily, the industry—one of the greatest in the country, will consume 100,000,000 barrels of cement next year and at least make six per cent on the investment. Without coöperation, without decent business-like methods, one with the other, as well as in the conduct of the individual business, this cannot be. If it does not come about, you can figure on a decline in the cement industry until such time as its management is conducted on the lines that mean minimum cost of production, minimum cost of marketing the product and maximum efficiency in knowing the typography of the world's markets for cement and showing, as this industry has in times past, the individual how to use cement. Then a greater era of cement consumption at a fair market price will further mean a dividend to the stockholders of the cement manufacturing firm, and this great industry will take its place as a commercial institution with other lines. It will then be looked to for information and be regarded as an influence for real commercialism and a greater prosperity to the building material interests of these United States.

EASTERN PRICES AGAIN BOOSTED.

New York, Nov. 1.—Special—Portland cement prices were unexpectedly advanced ten cents a barrel in this market today. This makes the New York price to dealers \$1.62 on new business and mill quotations at Lehigh valley \$1.00, and \$1.10 Hudson.

W. P. Corbett, manager of sales for the Alsens Portland Cement Co., said, when asked to confirm the report:

"We have followed the lead of others. Conditions have been such as to make such an advance necessary and it would not surprise me if \$1.25 mill prices prevailed by March 1. The causes are increased demand, low mill supplies, acute labor conditions and a disposition among manufacturers to get above the losing stage in producing this commodity. Even at this new figure of \$1.00 mill, the manufacturers will come out just about even this year in the light of the tremendous reductions prevalent earlier in the season."

A representative of the Lehigh Portland Cement Co. said to a representative of ROCK PRODUCTS AND BUILDING MATERIALS that while his company had not at that time announced its intention of making the change, that it probably would follow in line. The same statement was made by a representative of the Alpha Portland Cement Co.

LEHIGH TRAFFIC EMPLOYEES MAKE MERRY.

The first annual Hallow E'en banquet of the employees of the traffic department of the Lehigh Portland Cement Co. was held on Thursday evening, Oct. 28, at the Fairview Hotel, Lehigh and Union streets, Allentown, Pa. The banquet hall presented a most wonderful sight, decorated as it was with autumn leaves, pumpkins, corn stalks and cut flowers. The menu for the occasion consisted of chicken and waffles and those present unanimously agreed that the affair was a huge success.

F. E. Paulson, general traffic manager of the company, acted as toastmaster and music was furnished by Misses Rau, Dreisbach and Moyer, a trio of stenographers who can tickle the ivories as well as the keys upon a typewriter. The program for the evening consisted of speeches, card games, Hallow E'en novelties and dancing, music for the latter being furnished by the famous Lehigh Traffic Orchestra, consisting of J. C. Geiger, pianist; J. J. Clous, cornet; Edgar D. Otto, violin; W. F. Clark, banjo and mandolin and Arthur Krock on the drums.

The following persons surrounded the festive board and helped make the occasion the success that it was: Mr. and Mrs. F. E. Paulson; Mr. and Mrs. W. F. Clark, Mr. and Mrs. Thomas P. Refbord, Mr. and Mrs. Stanley F. Troxwell, Mr. and Mrs. Arthur J. Krock, the Misses Sarah Cunningham, Naamah Deeths, Netah Dreisbach, Estella D. Moyer, Mayme Rau, Anna Ritter, and James H. Lewis, John J. Claus, Russell Sheirer, Forrest Seigfried, Edgar D. Otto and J. C. Geiger. The banquet afforded such enjoyment that it was agreed by all those present to hold a similar meeting next year.

CONSUMERS COMPANY TO BUILD PLANT.

The contract for the construction of a Portland cement plant at Foreman, Ark., has been awarded to the Fuller Engineering Co., of Allentown, Pa., by the Consumers' Portland Cement Co., of Chicago. The plant will have a total capacity of 2,000 barrels manufactured by the dry process.

Officers of the company, which is located in the Lumber Exchange building, Chicago, are: Albert Graff, president; Edgar S. Bell, vice-president and treasurer; D. G. Johnston, secretary; C. B. Aydellette, director.

Full particulars of the new plant will appear in the next issue of ROCK PRODUCTS AND BUILDING MATERIALS.

WESTERN CEMENT PRICES RAISED.

An advance in the price of Portland cement for the Central West district, was recorded on Nov. 1, when offices at Pittsburgh, Chicago and other places in the district announced that thereafter the consumer's price of this commodity would be \$1.15 per barrel, figuring on the mill basis.

WABASH PLANT TO BE REBUILT.

The Hunt Engineering Co., of Kansas City, Mo., has just been awarded a contract to rebuild the plant of the Wabash Portland Cement Co., at Stroh, Ind. In addition to other improvements three new Allis Chalmers kilns will be added.

Seven men are believed to have lost their lives on Oct. 30 when the steamer Leona, owned by the Vancouver Portland Cement Co., founded in the straits of Georgia, near Vancouver, B. C.

LIME

LIME MAKERS TO MEET AT CLEVELAND.

Under the title, "The First Bugle Call," President William E. Carson has issued an announcement to members of the National Lime Manufacturers' Association stating that the annual meeting of this organization will be held in Cleveland, Ohio, during the first week of February.

PREPARING FOR SAND-LIME BRICK MEET.

Plans for an interesting program, as well as attractive social features, are being prepared by the Sand-Lime Brick Association for the annual convention to be held at the Republican house, Milwaukee, Wis., Dec. 7 and 8.

NEW PLANT FOR WARNER COMPANY.

A new lime plant is in the course of construction at Cedar Hollow, Pa., in which the rotary kiln will be used. The plant, which is being built for the Charles Warner Co., of Wilmington, Del., is designed to take four products, namely, pulverized limestone, pulverized quicklime, hydrated lime and Alca lime. It will have a capacity, figured on the hydrate basis, of about 70,000 tons per year. The cost of the complete plant, which will be ready for operation in February, 1916, will approximate \$200,000.

The Charles Warner Co. owns the Jones Rotary Kila patents for the burning of cracked limestone products for Montgomery and Chester counties, Pa., which cover the so-called Chester Valley and Plymouth Valley lime producing districts.

MAY DEVELOP BIG LIME DEPOSITS.

Placerville (El Dorado Co.), Calif., Nov. 4.—Engineers in the employ of the Southern Pacific railroad are engaged in surveying a spur line from a point near Diamond Springs, on the Placerville and Sacramento branch, to the Ringgold section and the lime deposits southeast of this city.

There deposits of lime covering 380 acres, owned by Mrs. E. J. Edick, D. and Mrs. W. W. Stone and the National Surety Co., formerly owned by W. J. Dingee, are all under bond to the California Portland Cement Co.

HYDRATED LIME IN CONCRETE.

Hydrated lime to the amount of one-tenth of a cubic foot to each cubic foot of cement is to be used for all concrete in the culverts, bridges and pavements of the six and one-half mile section of the Coleman du Pont road in Sussex County, Delaware. A concrete pavement is now being constructed in Somerset County, Maryland, under the direction of Henry G. Shirley, chief engineer of the State Roads Commission, in which a percentage of hydrated lime is also used.

SOME FACTS ABOUT LIMESTONE.

A ton of absolutely pure limestone would burn to a little over half its weight of lime, or about 1,120 pounds, which, counting 80 pounds to a bushel, would give 14 bushels of lime to a ton. The weight of the burned product, however, generally averages more than this, owing to impurities in the lime-

stone and also because in ordinary kilns the combustion is not complete enough to drive off all the carbon dioxide.

A cubic foot of limestone averages in weight from 145 to 175 pounds, which would make a ton of limestone contain from 11 to 14 cubic feet.

LIME NEWS IN BRIEF.

A report from Staunton, Va., is to the effect that the State Lime Board, E. T. Martin, secretary, contemplates asking appropriation of \$30,000 to establish another lime grinding plant which will probably be located in the Eastern part of Virginia.

The Elkhorn Lime Co. has been incorporated with a capital of \$250,000. The head office is at Madoc, Ont. Incorporators are C. W. Sharp, contractor, Stephen Wellington, W. P. Gillespie, James Skelton and C. G. Gillespie.

The Elora White Lime Co. has been incorporated with a capital of \$100,000. The incorporators include H. W. Shapley, W. B. Milliken and F. Lane. The head office is at Elora, Ont.

The Beaver Portland Cement Co., Northwestern National Bank building, Portland, Ore., is developing a new market for lime, considerable quantities having been placed with the farmers of the Willamette Valley for fertilizing purposes.

FORECLOSURE ON LIME COMPANY.

Foreclosure proceedings against the New Jersey Lime Co., of Vernon township, N. J., a successor to the White Rock Lime Cement Co. and the Hamburg Lime Co., of Jersey City, instituted in chancery court in Newark a few weeks ago by the Commonwealth Title Insurance & Trust Co., trustee for the bondholders of the defendant concern, have been sustained.

The foreclosure is based on an alleged default in the payment of interest since January, 1912, on 33 six per cent \$500 bonds issued by the lime concern in 1901, and also 67 bonds issued in 1904 by the White Rock company. These bonds are held by the Bethlehem Steel Co.

As holder of a second trust mortgage executed to secure bonds on which, it is alleged, no interest has been paid since their issue, the Fidelity Trust company, of Newark, also figured in the suit. Counsel for the Fidelity asked the court to have the amount due on the trust mortgage reported in the proceedings.

The Equitable Trust Co., of New York, is also a holder of a trust mortgage, executed in 1912, on which it is alleged interest payments are in default. The suit is being prosecuted by Theodore Simonson, of Newton, and Charles Hunsicker, of Philadelphia.

Although a layman, Walter Sheldon, of New Rochelle, N. Y., is acting as his own lawyer for the White Rock company. His motion for a postponement of the hearing was denied. The defendant concern has real estate holdings in Vernon township said to be rich in limestone.

Mr. Sheldon alleged conspiracy on the part of the Bethlehem Steel Co. and said the defendant company had been "trapped." He asserted that the steel company had done nothing for over three years and until a short time after the war started, when the foreclosure was started at a time when the company was not in a position to help itself.

The vice-chancellor decided that the hearing could not proceed on the theory of a conspiracy. He said the foreclosure proceedings ought to be allowed to stand.

RECENT LIME INCORPORATIONS.

Black-Gaywood Lime Co., Somerset, Ohio, has increased its capital from \$1,000 to \$5,000.

Grove Stone & Lime Co., Fostoria, Ohio; capital, \$10,000; incorporators, P. J. Bigham, F. E. Bell, J. P. Schoch, John Nye, W. O. Diver.

Concord Lime Co., Chattanooga, Tenn.; capital, \$15,000; incorporators, J. W. Miles, E. Scott Miles, I. G. Phillips, John D. Hyde and J. J. Lynch.

B. A. Robbins Lime Co., Inc., Cavendish, Vt.; capital, \$5,000; manufacture products from limestone; incorporators, B. A. Robbins, Alice N. Robbins, Cavendish; C. S. Frist and J. D. Cote, Bellows Falls.

The Dale Enterprise Lime Co., Harrisburg, Va., has recently been organized for the purpose of manufacturing agricultural lime. D. H. Swope was elected president and J. F. Sharpes, secretary-treasurer.

The plant of the Potomac Valley Stone & Lime Co., Pinesburg, R. D. (Williamsburg, Md.), has been leased to a Pittsburgh company and additional equipment will be installed.

The Crary Mills Lime Co., of Crary Mills, N. Y., has taken over a quarry at Gouverneur and will put up a lime manufacturing plant at once.

Farmers' Limestone Co., Parkers Landing, Pa.; capital, \$60,000; incorporators, S. M. Turk and others.

Maine Lime Co., Boston, Mass.; capital, \$200,000.

QUARRY BECOMES "WHITE ELEPHANT."

The municipal quarry of Madison, Wis., the capital city of the state, is proving to be something of a "white elephant," owing to the fact that it is paying no return on its original investment of \$15,000. The quarry was purchased several years ago, mainly for the purpose, it is said, of keeping the price of crushed stone down to 60 cents a cubic yard, but in the last few years the price has gone to 70 cents a cubic yard. The reason advanced for the municipal quarry remaining idle most of the year is that the city cannot get teams to haul the stone, with the demand for the stone being only intermittent.

PITTSBURGH QUARRIES KEEP BUSY.

Pittsburgh, Pa., Nov. 4.—Stone companies are about through delivering material for rush work. Most of the quarries north of Pittsburgh are still running and bid fair to continue in operation a good part of the winter if the weather is at all favorable. Those contractors which were fortunate in getting Allegheny county work this year have had a very good season. The main difficulty has been that prices have been cut hard, making it difficult to make old-fashioned profits.

The Austin-Western Machinery Co., of San Francisco, has sold a revolving screen to the board of supervisors of Yuma, Ariz. Collins & Webb, of Los Angeles, were the successful bidders on other machinery for Yuma, including a rock-crusher, a belt conveyor, bin gates and belting.

With the QUARRIES

Minnesota Has Most Modern Trap Rock Plant

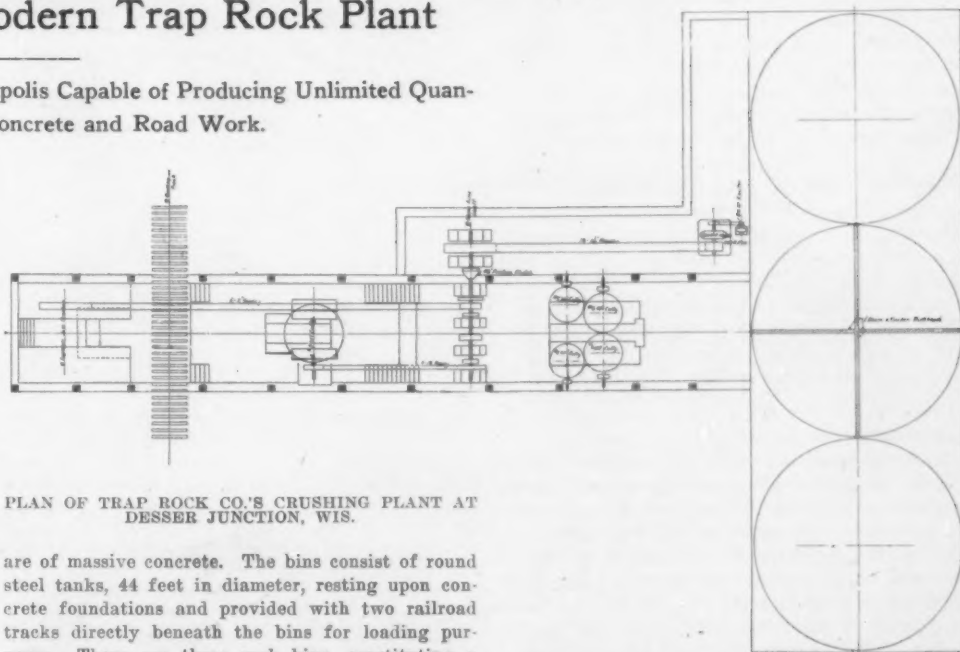
Operation Located Fifty Miles from Minneapolis Capable of Producing Unlimited Quantities of Hard Stone for Concrete and Road Work.

The new plant of the Trap Rock Co., located at Dresser Junction, Wis., is about 50 miles from Minneapolis, Minn., and on the main line of the Soo railroad. Its managers believe that the currents of Wisconsin and Michigan trap rock make a unique proposition within the shipping radius for hard rock suitable for concrete aggregate and road work very similar to that used along the Atlantic seaboard with great success. Trap rock quarries have never been developed to any great extent until recently. The splendid plant, completed less than a year ago at Dresser Junction, having a capacity of 2,500 tons per day, is without question the best equipment that has been installed, and its proximity to the important markets of the twin cities of Minnesota gives it an outlet for its operations which will doubtless continue indefinitely.

The company acquired all of the outcrop of Trap rock extending for more than a mile between Dresser Junction and St. Croix Falls and commenced construction of the plant in April, 1914. The plat of the property, shown herewith, indicates the exceptional commercial features of the location.

The initial crusher is a superior jaw, 84 by 60 inches, and is fed by side dump cars passing over a trestle in a train which is made up at the quarry face. This material is raised by a pan conveyor and so fed to a No. 9 McCully crusher, which discharges to an elevator that carries all of the material to a separating screen. This screen divides the oversize into two divisions, one of which is fed to a pair of No. 5 McCully crushers, while the rejects, over two and one-quarter inches in size, go into a pair of No. 6 McCully crushers. All of this material is sent to an elevator which carries the product to the final screening installation above the bin. All of this equipment is shown in the longitudinal section in an accompanying illustration.

The foundation of all of the machinery, as well as that of the bins and the building of the plant,

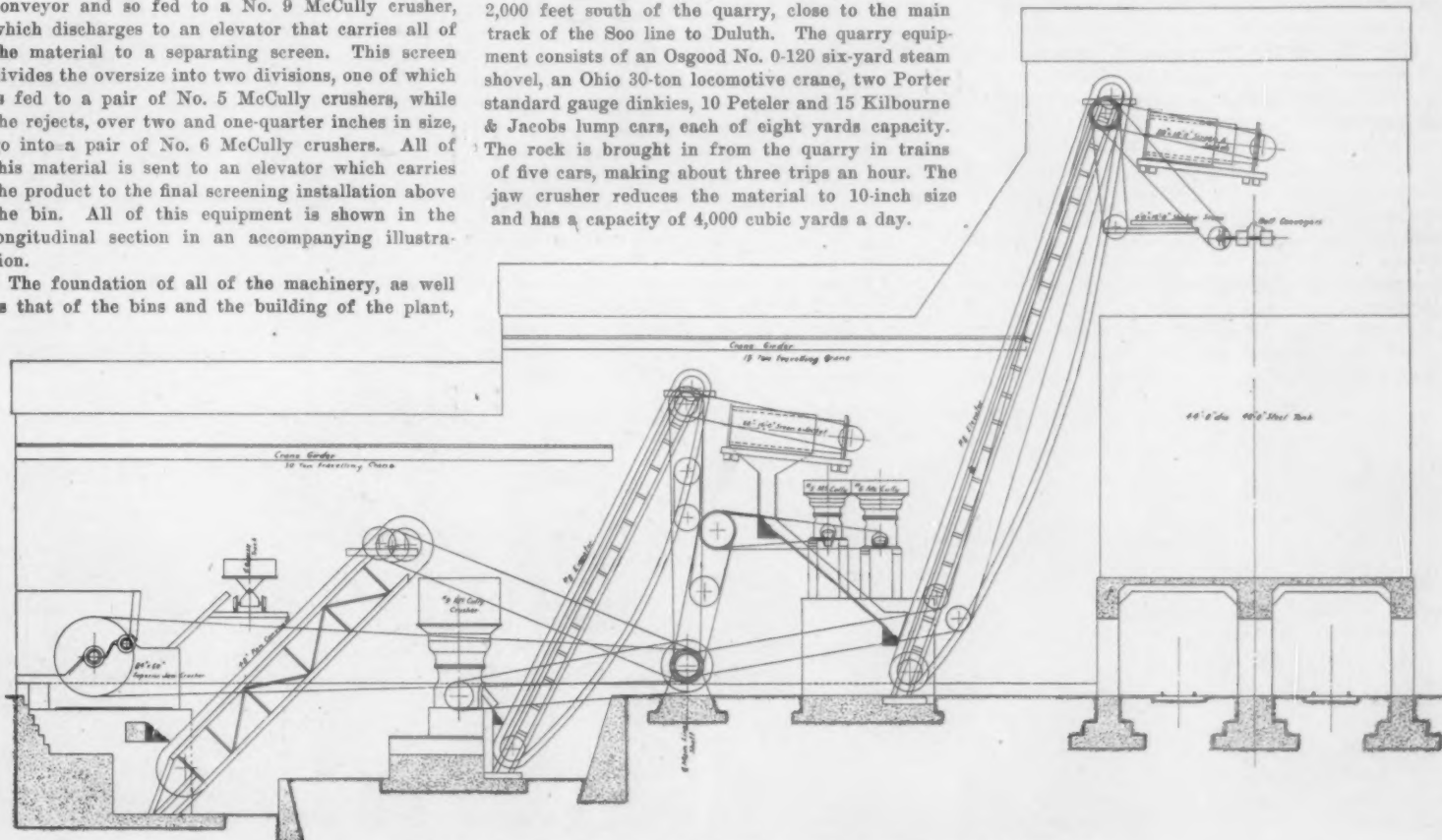


PLAN OF TRAP ROCK CO.'S CRUSHING PLANT AT DRESSER JUNCTION, WIS.

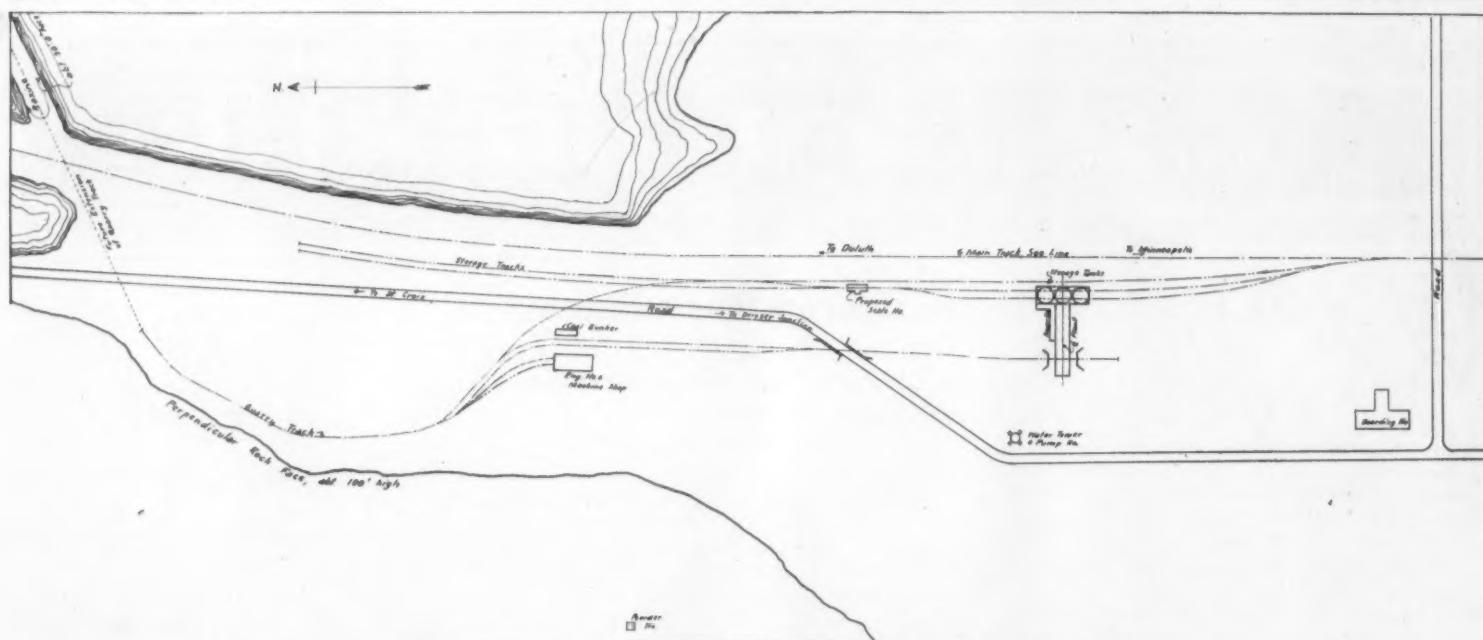
are of massive concrete. The bins consist of round steel tanks, 44 feet in diameter, resting upon concrete foundations and provided with two railroad tracks directly beneath the bins for loading purposes. There are three such bins, constituting a capacity of approximately 6,000 tons, while an outdoor storage system, laid parallel with the railroad tracks, provides a present capacity of about 7,000 yards. This can be extended indefinitely.

The crusher plant proper has been placed about 2,000 feet south of the quarry, close to the main track of the Soo line to Duluth. The quarry equipment consists of an Osgood No. 0-120 six-yard steam shovel, an Ohio 30-ton locomotive crane, two Porter standard gauge dinkies, 10 Peteler and 15 Kilbourne & Jacobs lump cars, each of eight yards capacity. The rock is brought in from the quarry in trains of five cars, making about three trips an hour. The jaw crusher reduces the material to 10-inch size and has a capacity of 4,000 cubic yards a day.

The center steel tank bin is divided into four compartments by I-beams and timber partitions, thus making provision for six different sizes of crushed rock beneath the screening plant. It is the intention to add eight more tanks to this storage



LONGITUDINAL SECTION THROUGH CRUSHING PLANT AT DRESSER JUNCTION, WIS.



PLAT OF THE QUARRY OF THE TRAP ROCK CO. AT DRESSER JUNCTION, WIS.

system, which will bring the bin capacity up to 26,000 cubic yards.

Every engineering ability has been made use of for the greatest possible facility in handling the machinery. A 30-ton crane can reach all of the equipment from the west end of the plant to the head of the No. 8 elevator, while the balance of the plant is in reach of a 15-ton crane. The power used is electricity obtained from the St. Croix dam, a distance of about five miles. A 400-horsepower motor drives the main line shaft, the power being transmitted by an English drive of fourteen one-and-one-half-inch ropes. From this line shaft the various units are driven by the English system of rope transmission.

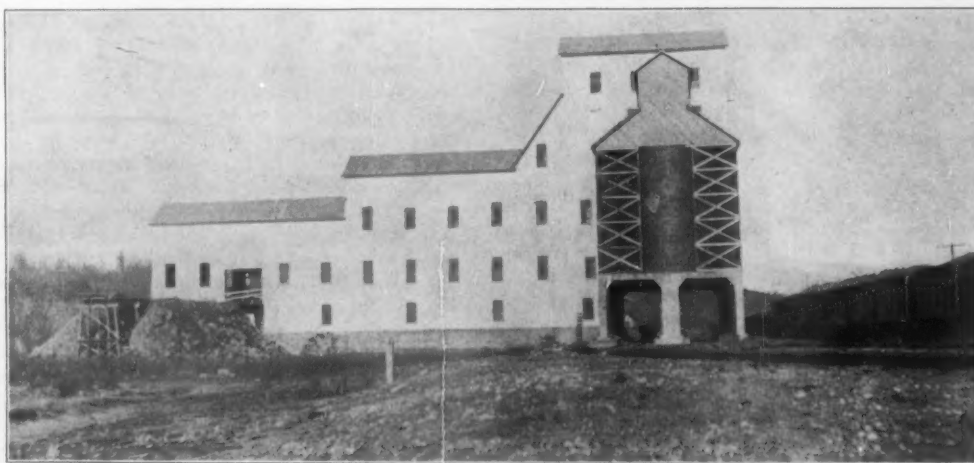
Water supply is provided by a 75,000-gallon tank placed on a tower 150 feet high. An American deep-well pump, with a capacity of 125 gallons per minute, supplies the tank, and the water is piped to different parts of the plant and quarry. A complete sprinkler system for the plant is contemplated at the close of the season.

The quarry, where operations are carried on, has a 100-foot face and a length at present of about 1,200 feet. Last season blast holes were sunk by vertical drills, but this method has been abandoned and horizontal drilling or "gophering" is being tried. The drills are operated by compressed air, the steam shovel supplying the power to the air compressor.

Five months after commencing construction the plant was far enough completed to start operation, and, considering that the concrete for foundations

and tank supports alone amounted to over 5,000 cubic yards, the progress made was remarkable. The crushing plant was designed and built by John Wunder Co., contractors and engineers, Minneapolis, Minn. The Power & Mining Machinery Co., Cudahy,

portant work is being done with trap rock. For road work there is a good demand in a large area, and for paving the territory includes practically all of Minnesota, Wisconsin and Iowa. The company is experiencing a very busy season and expects



SOUTH VIEW OF TRAP ROCK CO.'S DRESSER JUNCTION PLANT.

Wis., supplied the mechanical equipment, and the Electric Machinery Co., Minneapolis, the motor.

The quality of material in big supply assures a very ready market, and the company is shipping to the twin cities, where some of the most im-

to accumulate a large stock for delivery this winter.

Towne & Perdue, manufacturers and dealers in artificial stone ware at Los Angeles, have dissolved partnership.



STEAM SHOVEL IN ACT OF LOADING TRAIN AT DRESSER JUNCTION QUARRY OF TRAP ROCK CO.



PANORAMA VIEW LOOKING TOWARDS QUARRY. TAKEN FROM TOP OF PLANT DURING CONSTRUCTION.

SAND and GRAVEL

LOW GRAVEL RATE AIDS ROAD WORK.

Application having been made, in the interest of the good-roads movement, to the Railway Commission of Canada for an order requiring low commodity rates by railway companies for the transportation of gravel for use in road building by the municipalities of Western Ontario, the chief commissioner, after hearing the applicants and the railway companies, says in a decision, according to Consul O. Gaylord Marsh, Ottawa, Can.:

"The board can not order the companies to put in unremunerative rates, nor a rate so low as to be unfairly out of line with rates which are necessary to be maintained in order to permit the continuance of satisfactory operation of railways, due regard being had to proper consideration of the value of the commodities shipped and the service performed. * * * While, therefore, I felt that it was impossible for the board to make any order, the board has urged upon the companies the advisability of recognizing a public interest and the benefits which would result to the companies themselves from a proper system of good roads.

"I am glad to say that the railways now state that, regarding the question in the light of public policy and the possibility of increased railway business as a result of the added prosperity, and with the understanding that the rates offered are not to be regarded as indicating sufficient rates for similar commercial service, they will carry in the territory in question gravel that the municipalities require at a flat blanket rate of 50 cents per ton for any distance up to and including 50 miles, the rate to be a carload rate and cars to be loaded to their full stenciled carrying capacity; the gravel to be consigned to the clerk of the municipality and to be used for the purpose of road making; and the railway companies to be notified in advance of the number of carloads required, so that special instructions may be issued in each case. It is anticipated that 50 miles will be the maximum haul, but should municipalities at farther distances require the gravel the rate will be scaled down in the usual manner for greater distances."

A noteworthy feature of the decision is the evidence of a cooperative spirit on the part of the railways of Canada.

PITTSBURGH SAND CONCERNS BUSY.

Pittsburgh, Pa., Nov. 4.—Several companies have been doing a very good business lately, considering the time of year. Some new projects have been undertaken along the rivers, chiefly in manufacturing lime, which are making necessary the purchase of large amounts of sand. Also, river work is keeping some contractors well employed. Deliveries on the big downtown building projects are fairly well completed, as are also deliveries on the streets in the flood district, which were recently raised above flood level. There has been no high water or unusually low water to interrupt shipments on the local rivers and the fleets owned by Pittsburgh companies are all working at present.

ENTERPRISING CONCERN AT ERIE, PA.

The Erie Sand & Gravel Co., at Erie, Pa., is now one of the largest enterprises of its kind on the Great Lakes. It was founded in 1892 and was incorporated in 1900 under its present title. The com-

pany now operates three docks and a fleet of especially-designed steel boats, which are equipped with suction pumps for drawing the sand from the bars on the bed of the bay and lake.

It also has splendid devices for washing and screening sand. The cargoes are brought to the docks and automatically unloaded by four steam derricks, each with a ten-ton capacity. Electric loading devices are installed for winter use and in the summer hoppers, with a capacity of 150 yards, are used. The company's docks have a storage capacity of 150,000 yards of sand and gravel. The sand is a very fine-grained, clean-cut quality, making it exceptionally good for cement and plaster work. The company receives its gravel from Canada. The officers of the company are: Fred C. Jarecki, president; R. C. McClenathan, secretary, and J. S. Scobell, treasurer and manager.

NEW SAND AND GRAVEL VENTURES.

B. B. Sand & Gravel Co., Calgary, Alta.; capital, \$20,000.

Greenville Gravel Co., Liston avenue, Cincinnati, Ohio, will erect building costing \$6,000.

The Molly Stark Sand & Gravel Co., Canton, Ohio; capital, \$40,000; for the purpose of dredging, washing and handling sand and gravel, as well as crushed stone and other building materials; M. E. Evans, R. M. Fawcett and others are interested.

Chatham Gravel & Stone Co., Savannah, Ga.; capital, \$50,000; incorporators, M. L. Brennan, John M. Schroder, W. O. Gepfert, all of Savannah, Ga.

North Shore Gravel Co., Brookhaven, N. Y.; capital, \$100,000; incorporators, Joseph Beasley, John C. Deloca, Chas. W. Kay, New York City.

Buchanan Sand & Supply Co., St. Joseph, Mo., will erect a new sand and gravel dredging plant.

The Chagrin River Sand & Gravel Co., Aurora Station, Portage county, Ohio; capital, \$100,000; to operate a plant for production and handling of sand and gravel; incorporators, Jas. H. Griswold, John A. Hadden, W. E. White, R. Bailey and William H. Luther.

The Cahal Silica Sand Co., Chicago, Ill.; capital, \$5,000; incorporators, Alfred W. Boys, Belle Brown, Morton H. Eddy.

The West Jersey Sand & Gravel Co., Westville, N. J., is having plans made for a sand-handling plant, elevators, bins, etc.; Manwaring & Cummings, engineers.

The plant of the Leesburg Sand Co., near Slippery Rock, Pa., has been unusually busy this summer. It is now working a night shift to keep up with its orders. An electric light plant has been installed and more equipment has been purchased recently.

The Wiggins Crushed Stone & Sand Co., of Greenville, Ohio, has opened a large tract of gravel land at Fort Jefferson, Ohio, and will build a plant there in the near future.

The Wisconsin Sand & Gravel Co., of Milwaukee, has amended its articles of incorporation, increasing its capital stock from \$25,000 to \$50,000. Charles Biesanz is president and P. E. Sorenson is secretary.

The Greenville Gravel Co., Fort Jefferson, Ohio; capital, \$250,000.

WILL FIGHT FREIGHT INCREASE.

Dayton, Ohio, Nov. 4.—Several large shippers of sand and gravel in this vicinity are preparing to fight any advance in the freight schedules on those products, it being understood that such advances are proposed as will have the effect of localizing sand and gravel business in Ohio and preventing the product from moving into territory at any distance. It is felt that this would be decidedly unjust, and a strong effort will be made to prevent any such readjustment of the rates from being made.

TRAFFIC NEWS

The Huron Portland Cement Co. et al., Alpena, Mich., has filed complaint No. 8321, with the Interstate Commerce Commission, against the Detroit & Mackinac railroad, et al., charging unreasonable, discriminatory and preferential rates in upper Michigan, Wisconsin and Minnesota on cement. Complainant asks for reasonable through routes where none exist, reasonable and non-discriminatory and non-preferential rates from Alpena to points in the states mentioned.

The Glencoe Lime & Cement Co., et al., St. Louis, Mo., has filed complaint No. 8341 against the Pacific Mail Steamship Co., with the Interstate Commerce Commission, charging excessive, unreasonable and unjust rates on plaster fiber from San Francisco to St. Louis, via Panama and New York. Complainant asks for the application of the through carload rating and reparation.

The Traffic Bureau of the Toledo Commerce Club, et al., Toledo, Ohio, has filed complaint No. 8277, with the Interstate Commerce Commission, against Ann Arbor, et al., charging unreasonable, excessive and arbitrary rates from Toledo to points in Michigan, especially with regard to drain tile, building blocks, and brick and asks for the establishment of just, reasonable and non-discriminatory rates and reparation.

Nehpi Plaster & Cement Co., Gypsum and Salt Lake City, Utah, et al., has filed complaint No. 8260, against the Atchison railroad, et al., charging carload rates on cement from Gypsum, Utah, to San Francisco and interior California points, as unjust and unreasonable. Complainant asks for just and reasonable rates.

The Texas Cement Plaster Co., Plasterco, Texas, has filed complaint No. 8216 before the Interstate Commerce Commission, charging that the refusal of the Atchison railroad to establish through commodity rates from Plasterco to points in Oklahoma, Kansas, Missouri, Arkansas, Louisiana, Illinois, Iowa, Nebraska and Colorado results in unjust and unreasonable and undue discriminatory rates. Complainant asks for through routes and joint rates and reparation.

TRAFFIC LEAGUE TO MEET.

The annual meeting of the National Industrial Traffic League will be held at the Congress hotel, Chicago, Ill., Wednesday and Thursday, Nov. 17 and 18. An attractive program has been arranged and a good attendance is expected.

GYPSUM PRODUCTS

WILL SPECIALIZE IN FIREPROOF CONSTRUCTION.

The Grand Rapids Fire Proofing Co., with general offices in the Fourth National Bank building, Grand Rapids, Mich., has just been organized as a contracting firm for the purpose of erecting fireproof interior wall partitions of gypsum stucco blocks, tile, metal lath and wood construction, as well as plain and ornamental plastering. In the larger buildings, such as schools, libraries, office and apartment structures, special emphasis will be put upon the use of gypsum blocks. Economy of space and cost of construction are arguments used in favor of this type of wall partitions.

Officers of the new organization are Carrol M. Emerson, president; M. B. Mathews, secretary; L. Z. Caukins, treasurer, and W. H. Carl, vice-president and general manager. Mr. Emerson is president of the Grand Rapids Builders' and Traders' Exchange and manager of the Michigan Gypsum Co., whose mine, mill and offices are located in Grand Rapids. Mr. Carl hails from Detroit, Mich., where he was recently a member of the firm of the A. J. Smith Construction Co., large plastering contractors. He was manager of the plastering department and supervised some of the most elaborate plastering and ornamental work in the country. For several years he was manager of the American Fireproofing Co., of Chicago, having established its gypsum stucco block partition business. His experience makes him an authority on fireproof construction.

As a demonstration of the fact that this class of fireproof partition work is in demand, the new company calls attention to the Masonic Temple, Pantlind hotel, South End High, Lexington and Sheldon schools, Grand Rapids, Mich.; fraternity and college buildings, Ann Arbor, Mich.; Kahn building, Indianapolis, Ind., now under construction, and the Oliver hotel addition, South Bend, Ind., just completed.

Mr. Emerson states that branch offices of the company may be opened in Chicago, Detroit and Indianapolis.

NAME "ALL-YEAR CAR" EXCLUSIVE.

The advent of the convertible car has developed an interesting situation. Kissel brought it out last year and applied a name and gave it wide newspaper publicity. The public responded and this year other manufacturers began to make detachable tops. Then something happened. The trade name Kissel originated and applied, the "All-year car," began to creep into the literature and advertising of other manufacturers. At this juncture Kissel stepped in and said, "Stop!"

"We expected competitors to follow us on the 'all-year car,' as they did on the divided front seat and the two-door body," says George A. Kissel, president of the Kissel Motor Car Co., "but we must object to the use of our trade name. We designed and brought out the convertible car in 1914, and to make the identity of our product doubly sure, we applied the trade name 'all-year car' and spent thousands of dollars to let the public know about it."

Kissel conceived the two-door corridor car, which is now being generally used by many automobile manufacturers. The "all-year car" is the natural evolution of the two-door body. The Kissel "all-

year car" is tremendously successful. It solves an economic question in supplying a single car for continuous use throughout the year—as an open car in summer, and as a closed car in winter.

World's Trade Messengers Gathering in U. S.

More than 20 nations are represented by visitors to the United States who are now making their headquarters at the branch offices of the bureau of foreign and domestic commerce, department of commerce, and who are seeking new trade relations.

Many of these men are members of foreign firms which are preparing to make purchases here. Others are representatives of big commercial houses and offer unusual facilities for our manufacturers to establish agencies abroad. Their earnest efforts to meet us half-way in producing a greater volume of trade with their respective countries are making easier the progress of American commerce in this year of opportunity.

Some of these advance agents of business are not confining their efforts to any one section of this country, for reports from the several branch offices of the bureau furnish details of tours which take in several of the principal commercial centers.

Because of the foreign visitors flocking here, the bureau is dealing directly with buyers as well as sellers, and bringing both classes of business men together so effectively that there are results—purchases of American goods and the making of contracts for agencies in other countries.

One example serves to illustrate the character of these important developments. An agent from abroad who has been introduced to firms in the United States by one of the branch offices of the bureau represents both a wealthy land owner in Central America who is interested in numerous development projects, and a large commission merchant who operates throughout Central America and down the West Coast of South America, with an elaborate selling organization. Heretofore, the commission merchant has represented only the large European manufacturers, but they are shut out of the market by the war, and he has decided to push American goods.

Other interests represented are located in Australia, Russia, Italy, Argentina, Spain, India, China, Canada, Japan, South Africa, Bulgaria, New Zealand, Brazil, and several other countries. Each week during the present fall has added to the number. There is wide variety in the classes of goods sought.

The visit of the Bulgarian representatives last summer is an important incident in foreign trade development, as that country has rarely ever made an active canvass for American goods.

In all the negotiations that have been conducted and in those now in progress, the bureau has earnestly extended its co-operation. Its introductions, the agents report, have facilitated the transaction of business, because of the great confidence shown by business men here in the foreign representatives so introduced.

The General Crushed Stone Co., Easton, Pa., has increased its capital under Delaware laws from \$1,200,000 to \$2,400,000.

Brevities of the Retail Field.

The retail building material and hardware dealers of Pennsylvania are organizing the Pennsylvania Mutual Liability Association to insure its members against compensation. The workmen's compensation act in Pennsylvania will take effect Jan. 1, 1916. [The retailers' association will have its headquarters at Huntingdon, Pa., and C. H. Miller and W. P. Lewis, of that place, will be prominent officials of the organization.]

Lyman Felheim Lumber Co., of Erie, Pa., has placed an agency with the Wales Hardware Co., of Corry, Pa., to represent it in that place and carry its line of lumber and building materials.

G. L. Dudley and G. L. Dudley, Jr., have taken over the interests of W. S. Mercereau in the Mercereau Lumber Co., and have organized the Arrow Lumber Co. to continue the business. George P. Morgan is president and James Morris, secretary and treasurer of the company, which will locate at Parkersburg, W. Va.

The Pittsburgh Retail Lumber Dealers' Association has fixed upon Feb. 9 and 10 as the dates for its next annual convention in Pittsburgh. It has not been decided definitely where to hold the convention. The program committee is working up a number of new features which are likely to make it the best convention ever held in this city.

The Marston-Goss Lumber Co., of Donora, Pa., is growing rapidly and to accommodate its increasing business has bought 154 by 105 feet on Eleventh street. It will build a storage plant there at once and will later on move its entire plant to the new site.

The Valley Lumber Co. of Webster, Pa., is a new retail organization which has been formed by F. O. Brightwell and J. L. Hilderbrau, of Fayette City, Pa.; J. S. Rockwell, of North Charleroi, Pa., and S. M. Smith, of Belle Vernon, Pa. The company has bought a property in Webster and will fit up a lumber yard and planing mill at once.

Building material men in the Pittsburgh district are greatly encouraged by the fact that all steel mills in this district are now running to capacity. Architects and contractors both claim that this year is going to be a banner year in building. This will be especially true in the industrial towns where many hundreds of houses will be needed for the larger force of workmen that is now being employed. Many corporations have already started to build from 50 to 100 houses each for their workmen.

"HOME BUYING" POLICY URGED.

Following the announcement at Chattanooga, Tenn., that the University of Chattanooga had gone out of the city to employ an architect to draw plans for the new campus buildings, the Builders' Exchange, of that city, at once adopted resolutions expressing regret that the university had found it necessary to do so, and urging that in other departments Chattanooga contractors and material be given the preference. The fact that the university was erected partly through subscriptions from a number of Chattanooga citizens was deemed in itself an excellent reason why the business should be kept at home. Copies of the resolutions were given to the press and sent to each member of the building committee.

CLAY PRODUCTS

Paving Brick Makers' Convention Best Ever

The National Paving Brick Manufacturers' Association which held its annual meeting on Oct. 11, 12 and 13, at the new \$1,000,000 Miami hotel, at Dayton, Ohio, brought together perhaps the largest number of paving brick manufacturers in its history.

Intimately connected with the occasion, of course, was the meeting of the American Society of Municipal Improvements under the same roof, during the same week, which perhaps accounted for the presence of nearly every paving brick manufacturer in the country.

Apart from the business welfare of the association, which is manifest in its strenuous efforts to continually improve its product, and to exercise all its persuasive powers to influence the best use of paving brick under the solemn belief that giving to the public the very best that can be had in the use of paving brick as being the greatest assurance for public favor in the continued and increased use of its product, the occasion of the week's meeting in Dayton was made one of splendid fellowship and cooperation by the association extending to the American Society of Municipal Improvements and their friends a most elaborate evening dinner. Four hundred and fifty plates were spread for that number of guests and friends. A unique touch of delicate advertising was done by the ice cream being served upon a souvenir plate on which had been burned a brick street of beautiful design.

Beautiful and elaborate as was the spread, in a much greater degree was the character shown by the National Paving Brick Manufacturers' Association in the selection of the speakers and the assignment of their subjects, but best of all was the character of the speeches.

President W. O. Thompson of Ohio State University, known throughout the country as combining the gift of oratory and mastery of the subjects upon which he assumes to talk, was most delightful and entertaining upon the subject assigned him, "Efficiency and Economy of Public Expenditures."

The other speaker of the evening, Ex-Governor James M. Cox, of Ohio, dealt most effectively with his subject, namely: "Benefits Arising from Co-operative Efforts."

This occasion and these speeches, coming as they

did in the earlier part of the week, gave zest and spirit to the deliberations of the meetings which followed.

It developed in the meetings of the N. P. B. M. A. that that organization is determined to give even more attention in the future to the work of giving

ing highway courses in a number of states and has exercised a more direct influence in persuading all the leading institutions of the country carrying civil engineering departments to give special lessons upon brick street pavements. It has endeavored to be alert in the discussion of questions of construction arising from time to time by furnishing the technical and trade magazines with all the information at its command. Equal attention has been given to the



MEMBERS OF NATIONAL PAVING BRICK MANUFACTURERS' ASSOCIATION AT ANNUAL MEETING, DAYTON, OHIO.

to the public greater benefits to the more perfect structural building of brick pavements. This organization intensely believes that its pavements constructed in the best possible manner will bring greatest favor from the public and an increased use of its product.

The cooperative spirit shown by this organization by which they, with the engineers of the country, will give to the public better streets and roads, seemed to be the very heart that will give life and insistence to their work in this behalf. It has become known that some enthusiastic members of the association have furnished endowment funds for educational purposes in highway engineering in certain universities.

The association has been instrumental in establish-

writers of books by aiding them and assisting in every way possible toward accuracy of facts concerning the manufacture and use of paving brick. They are putting more engineers in the field to teach and instruct how their roads shall be built.

The personnel of the newly elected officers of the association is as follows: C. C. Blair, Youngstown, Ohio, president; J. W. Robb, Clinton, Ind., vice-president; C. C. Barr, Streator, Ill., treasurer; Will P. Blair, Cleveland, Ohio, secretary; H. H. Macdonald, Cleveland, Ohio, assistant secretary.

The association tried to keep in view the interests of the industry that are common and vital to all, allowing no diverse or selfish interest to distract, thus giving to individual interest the largest value after all.

ONE of our subscribers says
that he takes

**ROCK PRODUCTS AND
BUILDING MATERIALS**

home with him at night in order to read
it more carefully.

Are you getting all out of the paper that
you can? Read it from cover to cover
and you will certainly profit thereby.

Protect Your Walls—Marvel Window Chutes

protect against coal haulers and burglars. See the wings! What's the use of a pouch, anyway? Safety first. Marvels lock automatically. Heavy and indestructible.

Mr. Material Man: If you are early enough you can have the exclusive agency in your city, and our prices are right. And the individuality of the Marvel Chute makes it easy to sell.

DIMENSIONS AND PRICES

Chutes with Solid Iron Doors

NOTE—Marvel Junior has no wings. All others have swinging wings. Marvel Junior Marvel Marvel
No. 400 No. 413 No. 513 No. 518
Wall opening.....17x24 17x24 17x30 22x23
Depth of body.....9 in. 13 in. 13 in. 18 in.
Shipping weight.....65 95 100 186
Price\$5.00 \$7.50 \$8.50 \$12.00

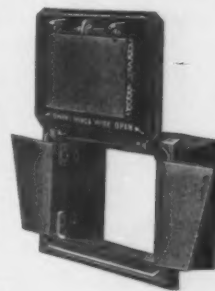
Chutes with Wire Reinforced Glass in Door

Marvel Junior Marvel Marvel Marvel
No. 100 No. 113 No. 213 No. 318
Shipping weight.....80 110 125 180
Price\$6.00 \$9.00 \$10.00 \$13.50

Chain opening attachment no extra charge.

Ask for Leaflet "B."

Interstate Mfg. Co., Oskaloosa, Iowa



Buying Power for manufacturers of building materials who wish to sell their products to the retailer

In your advertising—many a publication offers you quantity and even some quality of circulation. But isn't the real measure of buying power in the number of well-rated subscribers actually reading the paper with interest?

Rock Products and Building Materials
INCORPORATING DEALERS BUILDING MATERIAL RECORD
VOL. XVII CHICAGO, ILLINOIS NO. 1

ROCK PRODUCTS AND BUILDING MATERIALS is read by the worth-while retailers of builders' supplies. A recent tabulation of letters from one particular state, Ohio, illustrates this interest of the subscribers. These were but a few of a number of similar ones.

Are you taking advantage of this opportunity?

T. J. HALL & COMPANY
Coal, Cement, Washing River Sand, Flouting and Concrete Gravel
CINCINNATI, O. October 6, 1915.

Gentlemen:
I have been a subscriber of your paper for some time and have been very much interested in the material published therein. It is undoubtedly one of the best published in the building material trade at present. It is full of valuable information and is well worth the price paid for it. I am sure that it will be of great value to all who are interested in the building material trade.

Very truly yours,
T. J. Hall

M. L. BRANYAN & BRO.
COAL AND COKE
BUILDERS SUPPLIES
Hansford, Ohio. Oct. 9, 1915.

Gentlemen:
I have been a subscriber of your paper for some time and have been very much interested in the material published therein. It is undoubtedly one of the best published in the building material trade at present. It is full of valuable information and is well worth the price paid for it. I am sure that it will be of great value to all who are interested in the building material trade.

Very truly yours,
M. L. Branyan

WHEELER'S BUILDERS SUPPLIES
Having and Sale Brick, Sewer Pipe, Crushed Stone, Lime, Sand, Hard Wall Plaster, Portland Cement, Mortar Colors.
Cleveland, Ohio.
Oct. 9, 1915.

Gentlemen:
I have been a subscriber of your paper for some time and have been very much interested in the material published therein. It is undoubtedly one of the best published in the building material trade at present. It is full of valuable information and is well worth the price paid for it. I am sure that it will be of great value to all who are interested in the building material trade.

Very truly yours,
Wheeler

Schaeffer & Gengnagel
General Building Material Dealers
Dayton, Ohio. Oct. 11/15.

Gentlemen:
I have been a subscriber of your paper for some time and have been very much interested in the material published therein. It is undoubtedly one of the best published in the building material trade at present. It is full of valuable information and is well worth the price paid for it. I am sure that it will be of great value to all who are interested in the building material trade.

Very truly yours,
Schaeffer & Gengnagel

THE MOORE CONTRACTORS
The concrete Publishing Co.
127 S. Dearborn St.,
Chicago, Ill.

Gentlemen:
I have been a subscriber of your paper for some time and have been very much interested in the material published therein. It is undoubtedly one of the best published in the building material trade at present. It is full of valuable information and is well worth the price paid for it. I am sure that it will be of great value to all who are interested in the building material trade.

Very truly yours,
The Moore Contractors

THE DAYTON BUILDERS' SUPPLY CO.
BUILDING MATERIALS
Dayton, Ohio. Oct. 6, 15.

Gentlemen:
I have been a subscriber of your paper for some time and have been very much interested in the material published therein. It is undoubtedly one of the best published in the building material trade at present. It is full of valuable information and is well worth the price paid for it. I am sure that it will be of great value to all who are interested in the building material trade.

Very truly yours,
The Dayton Builders' Supply Co.

HARRISON & WESTERN
CINCINNATI, O.
MATERIAL OF ALL KINDS
3-114 Johnston Building
Cincinnati, Ohio. Oct. 6, 1915.

Gentlemen:
I have been a subscriber of your paper for some time and have been very much interested in the material published therein. It is undoubtedly one of the best published in the building material trade at present. It is full of valuable information and is well worth the price paid for it. I am sure that it will be of great value to all who are interested in the building material trade.

Very truly yours,
Harrison & Western

WHEELER'S BUILDERS SUPPLIES
Cleveland, Ohio. October 7, 1915.

Gentlemen:
I have been a subscriber of your paper for some time and have been very much interested in the material published therein. It is undoubtedly one of the best published in the building material trade at present. It is full of valuable information and is well worth the price paid for it. I am sure that it will be of great value to all who are interested in the building material trade.

Very truly yours,
Wheeler

THE DAYTON BUILDERS' SUPPLY CO.
BUILDING MATERIALS
Dayton, Ohio. Oct. 6, 15.

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The Dayton Builders' Supply Co.

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Cleveland, Ohio. Oct. 7, 1915.

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BUILDING MATERIALS
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Very truly yours,
The Dayton Builders' Supply Co.

Tell 'em you saw it in ROCK PRODUCTS AND BUILDING MATERIALS

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Faerberhill Mfg. Co. (bag tyers).
Jaite Company, The.
Urschel Bates Valve Bag Co.

BELTING.

H. W. Caldwell & Co.
Chain Belt Co.
Dull & Co., R. W.
Goodrich Co., B. F.
Imperial Belting Co.
Link Belt Co.
Revere Rubber Co.
Stephens-Adams Mfg. Co.
Webster Mfg. Company.
Weller Mfg. Co.

BRICK.

Belden Brick Co.
Metropolitan Paving Brick Co.

BRICK CLAMPS.

The P. D. Crane Co.

BRICK PAVING.

Metropolitan Paving Brick Co.

BUCKETS, DUMPING AND GRAB.

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Haise Mfg. Co., Inc., Geo.
Hendrick Mfg. Co.
Lakewood Engineering Co.
Link Belt Co.
McMyler-Interstate Co.

CABLES.

American Steel & Wire Co.
Dull & Co., R. W.
Sauerman Bros.

CALCINING MACHINERY.

Atlas Car & Mfg. Co.

CARS, INDUSTRIAL.

Atlas Car & Mfg. Co.
Austin Mfg. Co.
Haise Mfg. Co., Inc., Geo.
Lakewood Engineering Co.
Link Belt Co.
Stephens-Adams Mfg. Co.
Weller Mfg. Co.

CASTINGS.

Allis-Chalmers Mfg. Co.
Traylor Eng. & Mfg. Co.

CEMENT, CAEN STONE.

Cleveland Bldg. Supply Co.

CEMENT, HYDRAULIC.

Carolina Portland Cement Co.

CEMENT, PORTLAND.

Atlas Portland Cement Co.
Carolina Portland Cement Co.
Chicago Portland Cement Co.
Cincinnati Portland Cement Corp.
Coplay Cement Mfg. Co.
Crescent Portland Cement Co.
Huron-Wyandotte Port. Cement Co.
Kansas City Portland Cement Co.
Lehigh Portland Cement Co.
Marquette Cement Mfg. Co.
Northwestern States Portland Cement Co.
Ohio & Western Lime Co.
Phoenix Portland Cement Co.
Sandusky Portland Cement Co.
St. Louis Portland Cement Works.
Union Sand & Material Co.
Whitehall Portland Cement Mfg. Co.
Wolverine Portland Cement Co.

CHAINS.

Chain Belt Co.
Jeffrey Mfg. Co.
Link Belt Co.

CLAYWORKING MCHY.

American Clay Mch. Co.
Bartlett, C. O., & Snow Co.

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Interstate Mfg. Co.

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Samuel Cabot.
Calvert Mortar Color Wks.
Chattanooga Paint Co.
Ricketson Mineral Paint Works.
Williams, C. K., & Co.

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Allis-Chalmers Mfg. Co.
Clayton Air Compressor Co.
International Steam Pump Co.

CONCRETE MIXERS.

Chain Belt Co.
Lakewood Engineering Co.
Miscampbell, H.
Power & Mining Mach. Co.

CONCRETE REINFORCEMENT.

American Steel & Wire Co.

CONSULTING GEOLOGISTS.

Hunt, Robt. W., & Co.

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North Western Expanded Metal Co.
Sykes Metal Lath & Roofing Co.

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Cleveland Ry. Supply Co.
Link Belt Co.
McMyler-Interstate Co.

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Austin Mfg. Co.
Bartlett, C. O., & Snow Co.
Caldwell, H. W., & Sons Co.
Chain Belt Co.
Dull, Raymond W., & Co.
Ehrsam, J. B., & Sons Mfg. Co.
Haise Mfg. Co., Inc., Geo.
Jeffrey Manufacturing Co.
Link Belt Co.
McMyler-Interstate Co.
McLanahan Stone Machine Co.
Manierre Eng. & Mach. Co.
Power & Mining Mach. Co.
Stephens-Adams Mfg. Co.
Toepfer, W., & Sons.
Webster Mfg. Company.
Weller Mfg. Co.

CRUSHERS AND PULVERIZERS.

Allis-Chalmers Manufacturing Co.
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Austin Mfg. Co.
Bacon, Earl C.
Bartlett, C. O., & Snow Co.
Bonnot Co., The.
Bradley Pulverizer Co.
Butterworth & Lowe.
Chalmers & Williams.
Ehrsam, J. B., & Sons Mfg. Co.
Jeffrey Manufacturing Co.
K-B. Pulverizer Co.
Kent Mill Co.
Lehigh Car, Wheel & Axle Co.
Lewistown Foundry & Machine Co.
McLanahan Stone Machine Co.
Pennsylvania Crusher Co.
Power & Mining Mach. Co.
Raymond Impact Pulverizer Co.
Sturtevant Mill Co.
Traylor Eng. & Mfg. Co.
Webb City & Cartersville F. & M. Wks.
Williams Pat. Crusher & Pulverizer Co.

DRAIN TILE.

American Clay Co.
Vigo-American Clay Co.

DREDGES.

Osgood Co., The.

DRILLS.

Loomis Machine Co.

DEYERS.

American Process Co.
Bartlett, C. O., & Snow Co.
Link Belt Co.
Ruggles-Coles Eng. Co.

ENGINEERS.

American Process Co.
Bacon, Earl C.
Dull, Raymond W., & Co.
Fuller Engineering Co.
Hunt, Robt. W., & Co.
Improved Equipment Co.
Meade, R. K.
Sauerman Bros.
Schaffer Eng. & Equip. Co.
Smidth & Co., F. L.
Stephens-Adams Mfg. Co.
Traylor Eng. & Mfg. Co.
Yates, P. K.

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Power & Mining Mach. Co.

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Cable Excavator Co.
Raymond W. Dull Co.
Haise Mfg. Co., Inc., Geo.
Indianapolis Cable Excavator Co.
Link Belt Co.
McMyler-Interstate Co.
Osgood Co., The.
Sauerman Bros.
Weller Mfg. Co.

FIRE BRICK.

Carolina Portland Cement Co.
Improved Equipment Co.
Thornton Fire Brick Co.

FLOOR HARDENER.

Ceresit Waterproofing Co.

FURNACES FOR SPECIAL PURPOSES.

Improved Equipment Co.

GAS PRODUCERS.

Improved Equipment Co.

GATES.

Haise Mfg. Co., Inc., Geo.

GEARS.

Caldwell, H. W., & Son Co.
Chain Belt Co.
Link Belt Co.
Stephens-Adams Mfg. Co.
Weller Mfg. Co.

GLASS SAND MACHINERY.

Lewiston Fdy. & Mach. Co.

GYPSEUM BLOCK.

American Cement Plaster Co.
U. S. Gypsum Co.
Plymouth Gypsum Co.

GYPSEUM—PLASTER.

Best Bros. Keene's Cement Co.
Cardiff Gypsum Co.
Carolina Portland Cement Co.
National Mortar & Supply Co.
Ohio & Western Lime Co.
Plymouth Gypsum Co.
U. S. Gypsum Co.
Wheeling Wall Plaster Co.

HAIR.

Ohio & Western Lime Co.

HOISTS, ELECTRIC AND STEAM.

Allis-Chalmers Mfg. Co.
Link Belt Co.
Haise Mfg. Co., Inc., Geo.

HOLLOW CLAY TILE.

American Clay Co.
Metropolitan Paving Brick Co.
Vigo-American Clay Co.

HYDRATING MOHY.

Atlas Car & Mfg. Co.
Kritzer Co., The.
Miscampbell, H.

LIME.

Carolina P. C. Co.
Kelley Island Lime & Trans. Co.
Mitchell Lime Co.
National Lime & Stone Co.
National Mortar & Supply Co.
Ohio & Western Lime Co., The.
Owens & Son, John D.
Scioto Lime & Stone Co.

LIME, HYDRATED.

Kelley Island Lime & Transport Co.
Mitchell Lime Co.
National Lime & Stone Co.
National Mortar & Supply Co.
Ohio & Western Lime Co., The.
Scioto Lime & Stone Co.

LIME KILNS.

Atlas Car & Mfg. Co.
Improved Equipment Co.

LOADERS AND UNLOADERS.

Ambursen Company.
Chain Belt Co.
Haise Mfg. Co., Inc., Geo.
Jeffrey Mfg. Co.
Link Belt Co.
Manierre Eng. & Mach. Co.
Stephens-Adams Mfg. Co.
Weller Mfg. Co.

LOCOMOTIVES.

Davenport Locomotive Wks.

MANGANESE STEEL.

Allis-Chalmers Mfg. Co.
Link Belt Co.

METAL LATH.

Bostwick Steel Lath Co.
Carolina Portland Cement Co.
North Western Expanded Metal Co.
Sykes Metal Lath & Roofing Co.
Trussed Concrete Steel Co.

MOTOR TRUCKS.

Kissel Motor Car Co.
Pierce-Arrow Motor Car Co.

PAINT AND COATINGS.

Cabot, Samuel.
Calvert Mortar Color Wks.
Ceresit Waterproofing Co.
Chattanooga Paint Co.
Gordon-Hittl Co.
Ricketson Mineral Paint Co.
Williams, C. K., & Co.

PERFORATED METALS.

Allis-Chalmers Mfg. Co.
Johnson & Chapman.
Hendrick Mfg. Co.
Toepfer, W., & Son.

PLASTER.

See Gypsum.

PLASTER BOARD.

American Cement Plaster Co.
Plymouth Gypsum Co.
U. S. Gypsum Co.

PLASTER BOND.

Ceresit Waterproofing Co.

PLASTER MOHY.

Butterworth & Lowe.
Dunning, W. D.
Ehrsam, J. B., & Sons Mfg. Co.
Miscampbell, H.
Williams Pat. Crusher & Pulverizer Co.

PREPARED ROOFING—SHINGLES.

Carolina Portland Cement Co.
Reynolds Asphalt Shingle Co.

PUMPS.

Allis-Chalmers Mfg. Co.
International Steam Pump Co.

QUARRY CARS.

See Cars.

ROAD MACHINERY.

Austin Mfg. Co.
Osgood Co., The.
Troy Wagon Works.

ROOFING—METAL.

Sykes Metal Lath & Roofing Co.

SAND.

Union Sand & Material Co.

SAND AND GRAVEL WASHING PLANTS.

Dull & Co., Raymond W.
Link Belt Co.
Stephens-Adams Mfg. Co.
Webster Mfg. Co.
Weller Mfg. Co.

SAND LIME BRICK MACHINERY.

Amer. Clay Machy. Co.

SCALE CARS.

Atlas Car & Mfg. Co.

SCREENS.

Allis-Chalmers Mfg. Co.
American Pulverizer Co.
Butterworth & Lowe.
Chain Belt Co.
Dull & Co., Raymond W.
Ehrsam, J. B., & Sons Mfg. Co.
Haise Mfg. Co., Inc., Geo.
Hendricks Mfg. Co.
Johnston & Chapman Co.
Link Belt Co.
McLanahan Stone Machine Co.
Power & Mining Mach. Co.
Stephens-Adams Mfg. Co.
Sturtevant Mill Co.
Toepfer, W., & Sons.
Webster Mfg. Company.
Weller Mfg. Co.

SECOND-HAND MACHINERY.

Bourae.

SEWER PIPE.

Plymouth Clay Products Co.

SHEAVES, BLOCKS AND VALVES.

Haise Mfg. Co., Inc., Geo.

SINK AND FLOAT TESTERS.

Pennsylvania Crusher Co.

SPREADERS, ROAD.

Troy Wagon Wks. Co., The.

STEAM SHOVEL.

Osgood Co., The.
Thew Automatic Shovel Co.

STUCCO RETARDER.

National Retarder Co.

TRAILERS, TRACTORS AND MOTOR TRUCKS.

Troy Wagon Wks. Co., The.

TRAMWAYS.

Ambursen Company.
American Steel & Wire Co.
Link Belt Co.

TUBE MILLS.

Allis-Chalmers Manufacturing Co.
Power & Mining Mach. Co.
Smidth & Co., F. L.

WAGONS—DUMP AND REVERSIBLE.

Troy Wagon Wks. Co., The.

WALL PLUGS AND TIES.

Sykes Metal Lath & Roofing Co.

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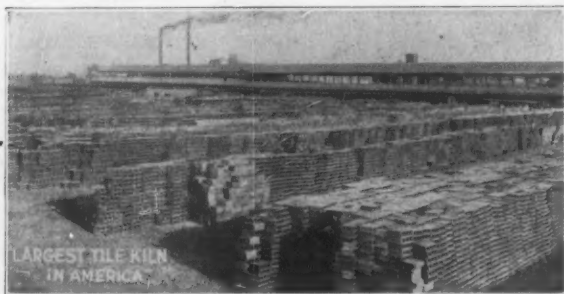
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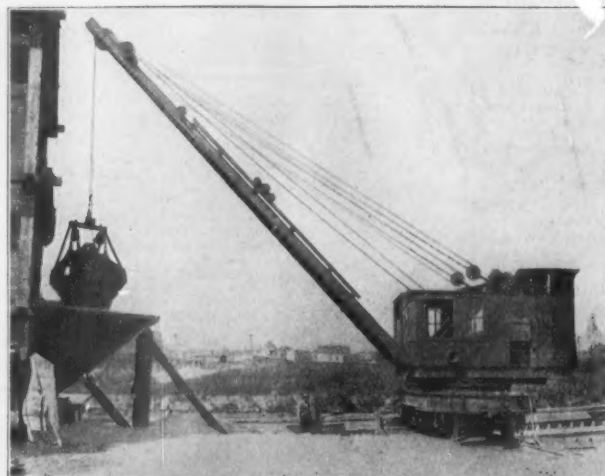
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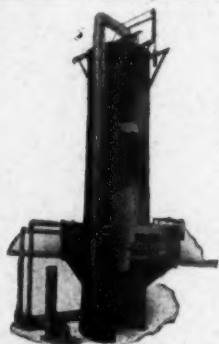
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